DOCUMENT RESUME

ED 337 370 SO 021 215

AUTHOR Dubbeldam, Leo, Ed.; Epskamp, Kees, Ed.
TITLE North-South Collaborative Research: Proceedings of the International Symposium on Education, Culture, and Productive Life in Developing Countries, The Hague, The Netherlands, December 9-21, 1988. CESO Paperback No. 8.
INSTITUTION Centre for the Study of Education in Developing Countries, The Hague (Netherlands).
REPORT NO ISBN-90-6443-711-4
PUB DATE 89
NOTE 136p.
PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Adult Education; *Developing Nations; Educational Development; Educational Policy; *Educational Research; Elementary Secondary Education; Foreign Countries; Foreign Culture; *International Education; *International Educational Exchange
IDENTIFIERS *Netherlands (Hague)

ABSTRACT

This document presents proceedings from a symposium designed to focus attention on present and future developments in education in developing countries, and to stimulate research on education in these areas. The document is divided into eight chapters: (1) background to the symposium; (2) setting the scene; (3) education, culture, and productive life: in search of the connection; (4) education and culture; (5) education and productive life; (6) research issues; (7) research issues and policies in the field of educational development and cooperation; and (8) summary: where do we go from here? Four annexes are attached. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 337370

SO 021 915

Proceedings of the International Symposium on Education, Culture and Productive Life in Developing Countries', The Hague, 9-21 December 1988

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

EPSKAMP, C. P.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

The task of the Centre for the Study of Education in Developing Countries (CESO), as its name implies, is to contribute to the study of the problems involved with education and development in the Third World.
CESO also offers consulting services with respect to policy issues, field projects and the evaluation of educational and training programmes.
A specialized Library offers extensive information about education in the Third World.

CESO
Nieuwe Parklaan 9
P.O. Box 90734
2509 LS THE HAGUE
The Netherlands
Tel. (070) - 3510591
Cable address NUFFIC
Telex 33565 nufic nl
Fax (070) - 3510596

edited by:
Leo Dubbeldam and Kees Epskamp

English version vetted by:
Greet Hooijmans

Lay-out and design: Louis Emmerik

© 1989
Centre for the Study of Education in Developing Countries (CESO), The Hague.

No part of this document may be reproduced in any form without permission from the publisher, except for the quotation of brief passages in criticism.

CIP-GEGEVENS KONINKLIJKE BIBLIOTHEEK, DEN HAAG

North-South

North-South collaborative research: proceedings of the International Symposium on 'Education, Culture and Productive Life in Developing Countries', The Hague 9-21 December 1988 / eds. Leo Dubbeldam, Kees Epskamp; (transl. from the Dutch by Greet Hooijmans). - The Hague: (CESO). - (CESO paperback; no. 8)
ISBN 90-6443-711-4 geb.
SISO 354.7 UDC 339.96
Trefw.: ontwikkelingslanden.

CESO PAPERBACK NO. 8

North-South Collaborative Research

Proceedings of the International Symposium on 'Education, Culture and Productive Life in Developing Countries', The Hague, 9-21 December 1988

Contents

List of abbreviations 7

Introduction 9

Chapter 1 Background to the symposium 13
1.1. Programme and participants 14

Chapter 2 Setting the scene: opening sessions. 17
2.1. Discussions: a summary 21
2.2. A summary of research requirements proposed in the first part of the symposium 23

Chapter 3 Education, culture and productive life: in search of the connection 25
3.1. Restriction to the accessibility of production sectors for women 25
3.2. Indigenous knowledge and skills: not to be underestimated in a productive life 28
3.3. Education and productive life of the underprivileged in the city and in the rural areas 30
3.4. Culture, attitude and productive life 32
3.5. Concluding remarks 33

Chapter 4 Education and culture 35
4.1. Education, culture and society 36
4.2. Educational systems: colonial versus traditional models 38
4.3. Content and process: national policies versus local culture, uniformity versus diversity 38
4.4. Values and value education 40
4.5. Educational materials and media 42
4.6. Indigenous learning and traditional education 43
4.7. Non-formal education 45
4.8. Concluding remarks 46

Chapter 5	Education and productive life	49
	5.1. Conceptual issues	50
	5.2. Forms of education with production	53
	5.3. Common experiences on education with production programmes	54
	5.4. Teacher training	55
	5.5. Financial and institutional implications	57
	5.6. Concluding remarks	58
Chapter 6	Research issues: from shopping list to policy guidelines	61
	6.1. Research guidelines and problems	62
	6.2. Papers presented on research: summarizing the highlights	63
	6.3. Report on the education and culture group	66
	6.4. Report on the education and productive life group	69
	6.5. Concluding remarks	70
Chapter 7	Research issues and policies in the field of educational development co-operation	73
	7.1. Dutch development aid	73
	7.2. Research policy development in the Netherlands	76
	7.3 Research on Education and Development	77
	7.4. The Programme Study	78
	7.5. Networking with the emphasis on South-South linkages	80
	7.6. Concluding remarks	82
Chapter 8	Summary; where do we go from here?	85
	8.1. Answers to questions; a review	86
	8.2. Equality in access to education	86
	8.3. Education and production	88
	8.4. School and work cultures	89
	8.5. The teacher in a focal position	91
	8.6. Different systems	94
	8.7. Indigenous learning systems	95
	8.8. Non-formal education	95
	8.9. Literacy	96
	8.10. Value education	96
	8.11. Use of the media	98

8.12. Research 98
8.13 Suggestions for CESO 100
8.14. Conclusions 100

Annexes

Annex 1	List of the participants
Annex 2	List of the papers prepared for the symposium
Annex 3	Abstracts of the papers prepared
Annex 4	Biodata of the participants

List of Abbreviations

ASEAN	Association of Southeast Asian Nations
CESO	Centre for the Study of Education in Developing Countries
CGIAR	Consultative Group International Agricultural Research
CINTERFOR	Centro Interamericano de Investigación y Documentación sobre Formación Profesional (Inter-American Research and Documentation Centre on Vocational Training)
CUSRI	Chulalongkorn University Social Research Institute
DELSILIFE	Development of a Coordinated Educational Intervention System for the Improvement of the Quality of Life of the Rural Poor through Self-Reliance
DGIS	Directorate-General for International Co-operation (Netherlands)
DICE	Department of International and Comparative Education (London University).
DSE	Deutsche Stiftung für Internationale Entwicklung (German Foundation for International Development)
EPTA	Research Programme on Education and Production in Theory and Action
ERASMUS	European Community Action Scheme for the Mobility of University Students
ERNESA	Educational Research Network for Eastern and Southern Africa
EWP	Education with Production
ICAE	International Council of Adult Education
IDRC	International Development Research Centre (Canada)
IIE	Institute of International Education
IIEP	International Institute for Education Planning
ILO	International Labour Office
ILS	Indigenous Learning System
INNOTECH	SEAMEO Regional Center for Educational innovation and Technology
IWGE	International Working Group on Education
NAR	National Advisory Board for Development Co-

	operation
NGO	Non-Governmental Organization
NORRAG	Northern Research Review and Advisory Group
NUFFIC	Netherlands Organisation for International Co-operation in Higher Education
NWF	Nort West Frontier (Province - Pakistan)
RAWOO	Advisory Council for Scientific Research in Development Problems
REDUC	Red Latinoamericana de Información y Documentación en Educación para América Latina y El Caribe
RRAG	Research Review and Advisory Group
SAARC	South Asian Regional Cooperation
SEAMEO	Southeast Asian Ministers of Education Organization
SEARRAG	South-East Asian Research Review and Advisory Group
SIDA	Swedish International Development Authority
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children Fund
WGOO	Dutch Association of Researchers on Education in Developing Countries

Introduction

After the Symposium on 'Education, Culture and Productive Life in Developing Countries', the staff of the Centre for the Study of Education in Developing Countries (CESO) sat down to analyse the wealth of information contained in the papers, presentations and group reports. CESO hoped that the Symposium would lead to a fruitful exchange of ideas and experiences, renew and extend contacts that would reach far beyond the meeting, and provide suggestions for research. The beneficiaries would be the research community at large as well as the Netherlands researchers and research institutes, including CESO.

The Centre itself looked forward to identify new topics and activities, leading to collaborative research with one or more partners in, especially, developing countries. In addition, the symposium was to be functional in the *Programmeringsstudie* (Programme Study), a study that should result in a set of research protocols for the coming years, linking researchers from the South with colleagues from the Netherlands.

(1) The Symposium

A limited, though still rather large number of colleagues from all over the world were invited to participate in all three parts of the symposium. They were asked to make a written contribution. During the opening part some participants were asked to make summary presentation of their papers.

For such a meeting to be a success is not only a matter of speaking and listening, but also a matter of asking the proper questions. During this symposium, at which people were supposed to meet because of their affiliation with research into education in developing countries, putting the right questions at the right moment was of particular importance.

It was hoped that the symposium would lead to suggestions - if possible action plans - for research. The outcome should preferably indicate priorities in research formatting and organization, task assignment, suggest forms of collaboration between institutes and individual scholars and donors. In this context also the problems should be considered in the research stage as well as in using its results.

The Symposium was organized on the occasion of CESO's 25th anniversary. A first question that came to mind was what we might learn from looking back over those 25 years. Some problems we experienced during the early sixties have been solved, or at clarified. But also some problems are still there. So what went right and what went wrong? A fact is that although growth has been forthcoming in education in developing countries in the past 25 years, although research and experiments have been conducted, nevertheless progress in certain respects has been disappointing. This is partly due to technical and external circumstances, but perhaps also to the wrong approaches made in terms of content matter.

What are the lessons for the future, so that we may avoid making the same mistakes again? What were the widely held assumptions that dominated national educational development plans and strategies as well as foreign aid priorities and practices in the 1960s and 1970s? In the light of experiences and changed circumstances, what modifications should be made at present? What could be the role of research in understanding the past and in preparing the policies and practice of the future?

Education, whether in the form of schooling, training, adult education or apprenticeship, will not automatically make a direct and immediately demonstrable contribution to the development of a country. The effects of education become apparent with much delay and they depend very much on the context in which people have to function. Almost all types of education depend on political choices, allocation of resources, applicability, relevance, etc.

A major problem is that such choices, if at all taking the contextual factors into account, are based on facts and analysis of the recent past and the present situation. But the results will be noticeable only after some time. Educationalists, when designing their programmes, find difficulties in sketching the needs of the future since they can rarely predict social developments based on political, social and economic decisions to be taken by others.

Education alone cannot solve today's problems. In those cases where natural, social or economic developments depend on decisions made by human beings education can contribute to developing those people. However, often the education of people takes place at the time when it cannot yet be foreseen when and where the skills, knowledge or attitudes can be used.

A similar story can be told about research. It does not automatically lead to results that have adirect and visible effect on the development of a society. Much research in many disciplines in the past shown to be along lasting effort, aseries of small steps finally leading to usable results.

In many cases research can, through analysis of facts, lead to the understanding of problems. The actual solution of such problems then

rests with others, policy makers or practitioners who pick up the research results and transform them into action. The priorities of policy-makers, are not those of practitioners or researchers. This leads to the question how research can be effectively linked to a co-ordinated and collaborative policy and practice.

Professor dr. Leo F.B. Dubbeldam
Director of CESO
November 1989

1.
Background to the symposium

In order to reflect on its previous experience and to create a forum for an for an exchange of opinion on future policies and directions, CESO organized its international symposium on 'Education, culture and productive life in developing countries' to commemorate its 25th anniversary. CESO opted for a symposium as it is a type of meeting in which scholars meet in order to share eachother's ideas and experiences. It is an opportunity to think together and discuss, and finally to make plans, hopefully for joint action.

The title of the symposium reflects the Centre's ten years of concern for basic education for the masses and expresses two of its current research interests, being 'education and culture', central to CESO's involvement in the SEAMEO/INNOTECH project on the Development of a Co-ordinated Educational Intervention System for the Improvement of the Quality of Life of the Rural Poor through Self-Reliance (DELSILIFE); and 'education and productive life', especially apparent in CESO's involvement in the Research Programme on Education and Production in Theory and Action (EPTA).

The Symposium was to give fresh attention to present and future developments in education in developing countries; to stimulate scientific research into education in developing countries; and to provide suggestions for a possible new profile for CESO as a research institute, as an institute providing support for policy purposes, as a centre for documentation and information and as a key link in a national and international network of researchers and practitioners.

Moreover, the symposium was seen as a unique form to discuss a Programme of collaborative research involving institutions in the South and in the Netherlands; a programme which CESO is to design in close co-operation with the Dutch Association of Researchers on Education in Developing Countries (WGOO) and with active participants of networks of educational researchers in developing countries (e.g. Research Review and Advisory Groups, or RRAGs), donor organizations, research and policy-making institutions. The symposium was considered to offer a good opportunity to consult the participants about research needs, about the application of research results, potential user groups, and matters concerning funding and organization.

(1) Programme and participants

The symposium consisted of three parts. The first part provided a general orientation on the themes and a reflection of CESO's achievements in these areas (2 open days).

The second part provided participants from the South, CESO staff and a small representation of the Dutch research community with a platform for critical reflection on the achievement, constraints and requirements related to education and culture and education and productive life (five days of restricted participation). The third part of the symposium, with a stronger representation from the North, including representatives from donor agencies, was a presentation of the conclusions and recommendations on research priorities based on the second part. Plenary presentations were given on the Programme Study, on activities of the RRAGs in the different regions and on educational research requirements related to the informal sector. In working- groups the outcomes of the second part of the symposium and the Programme Study were discussed. The symposium also provided a venue for a North-South RRAG meeting and an EPTA network meeting.

The core group of participants attending the entire symposium consisted of 25 specialists from the South, working in 16 developing countries. The regional representation of participants was rather wide with eight participants from Southern and Eastern Africa, five from SAARC countries, eight from ASEAN countries, two from East Asia, two from the Caribbean and one from Central America.

Both countries with centrally planned economies such as Ethiopia, Mocambique, People's Republic of China ,and countries with market economies in different stages of development, such as Hong Kong, Thailand and Kenya were represented.

This diversity reflected in value systems and, hence, in education systems and in the approaches towards education and production, added to the richness of the exchange in the symposium but sometimes made it hard to discover common denominators.

Many participants were affiliated with universities (12), from the departments of education, social science, communication, open university or from labour studies. Six participants were working for the Ministry of Education or in a co-ordinating institution for educational research. Two participants were working for a regional institution, INNOTECH, two for NGO's, one was working for a specialized institution for labour education, two were Dutch experts working as consultants to a self-help project in education and to a linkage scheme between the university of Groningen and Maputo, and one was a headmaster of a private school. Seven participants were closely linked to the EPTA network and four were involved in the Delsilife project.

Apart from the 25 specialists from the South, one representative from UNESCO and one from ILO, two Dutch researchers, board members of

WGOO, and eight staff members of CESO attended the whole of the symposium. The first and especially the third part of the symposium attracted 14 additional non-Dutch participants, mainly from the North, from universities and donor organizations. Donor organizations were well represented at the symposium with delegations from DGIS, World Bank, IDRC, the Commonwealth Secretariat, DSE and the British Council. Moreover three representatives of ILO and two from UNESCO attended parts or the whole of the symposium.

Finally, there was a large diversity of participants from the Netherlands, consisting of Dutch researchers, students and staff of International Education institutions, representatives of NGO's involved in development co-operation and private consultants.

2.
Setting the scene: opening sessions

The CESO Position Paper provided a theoretical framework for the symposium. During the presentation of lead papers and key-note addresses, as well as during workshop and plenary sessions CESO's Position Paper functioned as the main guideline setting the themes for the deliberations and discussions concerning the relationship between education, culture and productive life in developing countries. It was indicated that the two main themes, 'culture' and 'productive life', were strongly interrelated, as stated in the Position Paper (1988:3):

> "The culture of a society determines the form and content of its educational processes. Equally the needs arising from productive life determine the form and content of education. By the reverse token education together with human creativity can influence people's culture as well as their entire productive life and even radically change them. The three (education, culture and productive life) are indivisible. The question is how one can combine and integrate the three with a view to the most harmonious possible development of society."

The process of transferring knowledge, norms and values occurs through education. Education here implies more than what normally occurs in schools or in the formal education system. It also includes what are referred to as non-formal and informal aspectsof education. Education thus acquires a broader meaning covering all aspects of knowledge, skills, norms and values transferred from one generation to the next in a continuous process.

In the Position Paper sets of key questions were proposed, to be used as guidelines for the deliberations during the symposium. Key questions such as: "what is the minimum kowledge which members of a society are required to have for adequate social and functioning and to make a useful contribution to the economic development of the community or the country?"; "to what extent do literacy and numeracy constitute the desired minimum?" "why has literacy been functional in some regions and not in others?"

Habte in his key-note address raised the first key questions posed in

CESO's Position Paper, which reflects issues dealt with in the forthcoming World Bank Document on 'Improving the quality of primary education in developing countries'. In developing countries there is little ambition for all primary-school-aged children to reach commonly accepted standards of basic skills. What basic skills must be imparted to all children to enable to live productive lives? As in 1985 100 million school-aged children in developing countries did not attend school (high concentrations in sub-Saharan Africa, Pakistan and Bangladesh and about 60% girls), the question of acquisition of skills for productive employment and useful activities becomes important. Since many youths without exposure to formal education will join the ranks of the traditional small sector, there is a need for more research related to training including literacy and numeracy for the informal sector.

In his lead paper, Socrates referred to Delsilife's work on the topic 'Integrating education and economic productivity through self-reliance'. Delsilife aims to develop basic skills including literacy and numeracy integrated in a needs-based learning programme, utilizing appropriate materials and procedures. While Habte pleads for a competency-based curriculum for formal basic education, Socrates pleads for development research to include the preparation of a competency-based curriculum and its deliver in non-conventional ways.

Tomesen approached basic skills requirements from the productive angle. Due to the poor educational base in Pakistan in general and the North West Frontier (NWF) in particular, most entrepreneurs and workers are semiliterate and have learned their skills through an apprenticeship scheme exclusively. In order to upgrade small workshops related to new technological developments, upgrading training is required. This calls for research into learning processes for illiterates and into the requirements, quality and effectiveness of appropriate teaching aids for this target group.

In the discussions and presentations, there is a clear trend to shift the emphasis from quantity to quality, from schooling to learning, from sheer output to processes and from global to community and school-based analyses. Habte refers to the crisis facing education in developing countries. Even though enrolment figures have risen, students from developing countries are getting not only fewer years of education, but are learning less during those years than students from higher income countries. Many developing countries are faced with high repetition and drop-out rates in primary and secondary education.

Where there are scarce resources available for investment in education, wastage phenomena of drop-out and failure are a fairly common problem facing educational policy makers. In Indonesia the primary enrolment rate is very high, but the drop-out rate is 33%, which is extremely high. Ethiopia is faced with high drop-out rates in lower grades, gradually decreasing in the higher grades. Surinam has to cope

with high repetition rates in the lower grades of primary education.

The World Bank's emphasis on quality of education, in its forthcoming Policy Document is evident in its call for more insight into 'effective schools'. In general within primary and secondary education, more research is required related to curriculum, learning process and pedagogic aspects in an effort to strengthen educational achievement. Research is required related to approaches and instruments to be developed to assess student achievement. Increased attention must be given to the strengthening of educational management. It was suggested that headmaster training and experience have a significant effect on achievement. Additional studies seem to be required, according to Habte, especially in low-income countries, to create more effective schools.

Effective schools should provide relevant learning. Relevance refers to the applicability of skills and knowledge in daily and the situational context of learning. For that reason, Dubbeldam sees the need for more research into learning processes: through participatory research the cultural context of learning needs and processes should be explored, since this is basic in determining curricula and in designing teaching aids and methods. A problem-oriented approach to education research seems called for.

Two lead papers, by Hoppers and Kane, share this theme of problem orientation. Their studies in Zambia and Ghana, focusing on the participation of women in formal technical vocational education and on providng training for work in the formal and non-formal sector, pleaded for such problem-oriented approach. Women's workloads, time-tables, domestic responsibilities, access to transport and control over money and decision making are such that the format, venue and costs of vocational programmes would have to be radically restructered if women were to participate. We need to know what women in all their variety actually do, at various points in the life cycle and day by day. As Kane states: "What are their real options, as opposed to the ideal ones?" In a broader framework than women's access toschooling, this analysis may be applicable to access to and sustainability of schooling as a precondition to school-based learning for both sexes.

Effective learning may not only be based on proper learning objectives, competency-based curricula, headmaster and teacher training instruments for assessing student achievement, but may require a proper assessment of learning needs providing school leavers with a minimum package of basic skills to survive in their own community. This requires the participation of the community in planning and design. The Delsilife programme fosters such participation in developing basic skills through the involvement of the community in needs assessment, formation of learning groups, training of group leaders, development of learning programmes, implementation of the learning programme and evaluation. 'Participation' seems a key-word here.

According to the presentation of Cabral de Andrade "a very active participation of the outside community in the programme and an adequate preparation of all parties involved" is one of the criteria for success as used within ILO/CINTERFOR research of education with production projects in Latin America in formal and non-formal education. This participatory approach has not yet been achieved within the EPTA programme, as described in one of the lead papers by Hoppers, in Southern and Eastern Africa:

> "There is a danger of EPTA remaining academic in orientation and loosing its relevance if it cannot find means to directly work with people in the schools, colleges and training or work centres. Within the second phase the priority will be to arrive at a dialogue between researchers and practitioners. The excessive emphasis in reviews on conventional survey instruments with outcomes that are often imcomprehensible to the practitioner shows how much creative thinking still needs to be done."

In Southern and Eastern Africa, education with production, while official policy in several countries, is not a dominant mode of thinking. It takes a modest but rather controversial place among various schools of thought concerned with the relation between education, work and society. There are different interpretations of its various dimensions as well as the value and outcome of its practice.

Although in Africa education with production is mostly associated with the incorporation of an element of practical training and of production into activities of primary and general secondary education, much literature on education and production in Africa is mere advocacy. Research is needed to assess the effectiveness of education with production (EWP) programmes in comparison to the conventional school in terms of mastery of academic subjects, change of attitude towards manual work, labour market outcomes and cost- recovery through income from production activities.

Thus, there seems to be a general tendency (also based on the failed attempts towards diversification of secondary education) for commonly accepted standards of basic skills at the primary level. The time within the primary curriculum spent on vocational subjects is to the expense of mastery of basic skills. On the other hand there seems to be a renewed commitment to decentralization and the importance of decision making processes in the school. In how far would school-based decision making also cause the design of part of the primary school curriculum to meet the requirements of its proper work and adult life environment?

The research done in Latin America shows the diversity of approaches and the importance of the economic system (planned socialist economies

versus market economies) in this respect. Within market economies it proves to be very difficult to integrate production in the curriculum, and proper implementation within formal education institutions is hampered because of the rigidity of the system, according to Cabral de Andrade. As Dubbeldam indicated, education with production (EWP) is a matter of values to be brought into education. Who decides on the curriculum of educational programmes? Along the same line, or as a result of this, who sets the priorities in education and what are the mechanisms in determening research priorities?

According to Habte, one of the areas where a great deal more research will need to be done is into training for small-scale industries and the informal sector, where the bulk of productive employment opportunities can be found. This research area has been neglected. In this field training is always perceived as integrated with production. Neither the owners, nor the workers within small production units see training as a seperate entity. Training in training institutions, on the other hand, is completely seperated from production. Attending training sessions means a loss of opportunity costs to the production unit without insight into the return of training costs.

Socrates stated that Delsilife encouraged a technology impact analysis as a measure of the effectiveness of the intervention at the community level. Based on the experience with a Dutch-aided project to boost small-scale enterprises through an integrated intervention package including training delivery by mobile units, Tomesen suggested inter-regional comparison of the successfullness of small industries intervention programmes. In the context of this training programme, measuring the impact of literacy might provide an indication of a correlation between literacy on the one hand and capital investment by category earnings and adoption of new techniques on the other hand.

This could be part of the much demanded research into the links between education and economic growth, including the relation between education and technology. Following Dubbeldam's paper, participants emphasized the need for research into the impact of technology on work cultures.

(1) Discussions: a summary

At various instances during the plenary discussions on the key-note addresses and the lead papers, participants expressed the feeling that most of the cases presented, concentrated on rural and not on urban areas. Questions were asked whether, for example, EPTA activities could work in both areas and whether the same methodology could be used. Possibly the many examples of activities in rural areas are a result of donor attention, during the past decade, for rural development rather than urban development. There might be a shift in emphasis now the Decade of Human Settlements (Habitat) has been declared.

Some general suggestions were launched on training and education policy and planning. One of them was the emphasis on greater attention to be given to strengthening of management of the educational enterprise. This seems to be in line with the demand for improvement of management in both public and private sectors in general. Integral management of the schools needs attention and improvement: for example, it was suggested that headmaster training and experience have a significant effect on pupil achievement.

In various ways attention was asked for the involvement of the people concerned in planning and design. The mechanism of participatory research in the process of curriculum design and the development of teaching aids and methodology has been insufficiently explored and used. It not only proves to be effective in the work CESO did in the education project in the Amazone area, but also in the Delsilife project, as described by Socrates. He stated that it is the people who develop the community, and therefore the Delsilife project's main aim is to enable the people to help themselves. The Delsilife project shows the inputs by and the leadership of the people. Active participation by the communities was also stressed in the paper of Cabral de Andrade's paper.

Close to this is Kane's plea to opt for a 'problem-approach' rather than a 'programme-approach', which prescribes ideas and solutions. Kane referred to the underlying and supposed 'domino effect' in development projects with a programme-oriented approach: the idea that changing one thing within a community will automatically cause a change in other sectors, and in the end will improve the general quality of life in the community. This issue of inter-relatedness of cultural elements and how new elements find their place in the existing pattern, instead of side by side with older elements, was also discussed in Dubbeldam's presentation.

Cultural aspects in the design of curriculum and teaching programmes raise many political issues. The question is how to handle these. Through all educational programmes there is the question of what should be the content and implementation of what is called 'value education'. Questions can be raised about who decides on the values to be brought into education and schooling and more widely on who decides on the curriculum of educational programmes. Along the same line, or as a result of this, who sets the priorities in education and what are the mechanisms in determining research priorities?

Much more emphasis should be given to research and to building research capacity. There is inadequate research experience and training. There is still a problem in the dissemination of research results, both in exchange and training of researchers. This includes both documentation, publication and exchange of experiences. Hoppers indicated the usefulness of multinational research projects and the role in this of local, regional and international seminars in which research results are presented and discussed.

Quite some *suggestions for research priorities were made. To mention* a few: effective schools, student achievement, female access to schooling, educational technology, learning, dissemination of knowledge and skills within business enterprises and learning processes in general. Basic research in education, for example insight in learning needs, local capacities and indigenous learning systems, will not produce immediately applicable results. Yet governments and donor agencies should be called upon to support such research because it is fundamental to practical implementation.

As discussed above on the subject field of education and productive life, education-cum-production varies in the different countries, not only in its objectives and organization but also in its functionality. It seems further research along these lines in Africa and Asia is needed. In general one may state that more comparative research in the field of education and production as well as in education and culture is needed. In these research activities extra attention should be paid to the communication of research plans, implementation and results among researchers, authorities and practitioners. The same is valid for the relation between priorities held by researchers and those felt by authorities and donor agencies.

Therefore, much attention was asked for maintaining networks of researchers. Such networks can be useful in issues as mentioned above, in strengthening research capacity and dissemination of research results. Yet there are some questions as to who should be the members of such networks. Only researchers, or also officials of the ministries of education and practitioners? So far, few of the latter groups seem to participate.

Along the same line is the question wheter such networks ought to be composed of individuals or institutions. In a way practice has shown that it works best if the members are individuals. Yet it is apparent that a strong institutional support is needed.

(2) A summary of research requirements proposed in the first part of the Symposium

- research in support of learning processes in primary and secondary education;

- research into competency-based curricula both in formal and non-formal education;

- research into the causes and solutions concerning wastage in educational investment owing to drop-outs and high repetition rates;

- research into management of the educational enterprise in general and the link between headmaster training and pupil achievement in particular;

- participatory research into learning processes identifying the cultural context of learning needs;

- research identifying contraints to women's access to education and vocational training;

- research on flexible time-tabling for schooling in the rural areas;

- research into decentralization of decision making leading to community-based or school approaches towards curriculum development;

- research into the effectiveness of education-with-production programmes compared to conventional schools in terms of mastery of academic subjects and post-school labour market outcomes;

- technology impact analysis at community level as a measure of effectiveness of education and training interventions;

- inter-regional comparison of the success of small industries intervention programmes concentrating on the training intervention including literacy and numeracy training;

- research into the development and testing of proper training methodologies and delivery modes for training for the informal sector;

- research into the impact of technology on work cultures;

- research into the effectiveness of different (indigenous and other) communication media in imparting knowledge, communicating information or enhancing cultural values;

- assessment of the applicability and sustainability of a wide range of technologies for improving the quality and availability of education and training;

- research into learning processes for illiterates and into the requirements, quality and effectiveness of learning material for this target group;

- research into value education.

3.
Education, culture and productive life: in search of the connection

The success of new educational initiatives depends on how they fit into the cultural context in which they are implemented. This is of crucial importance on all levels. According to Habte (1988: 1) we all know that culture influences the foundations of education, by determining the state of mind of the nation. On the level of schools, the appreciation of the local culture is the key to the success of new initiatives. When planning and implementing education programmes, the decisions concerning the development of the curriculum, the language used in class, the respect for local tradition and calendar have to take into account the local culture.

Particularly the work being done by UNESCO and other institutes in the field of indigenous languages and cultural heritage have played a major part. But contemporary culture products from developing countries also deserve more appreciation. That is why Habte (1988: 1) attaches great significance to the Nigerian author Wole Soyinka having been awarded the Nobel Prize.

According to Habte (1988: 13-14), the two greatest dangers to today's development of education are the continuing economic crisis, which started in the late seventies, and the fast growth of populations. Particularly the growth of the population, dependent on ideas, values and standards as regards family life, has a cultural dimension.

(1) Restrictions to the accessibility of production sectors for women

The concrete forms of a productive life are different for each society, and are therefore culturally determined. Take for example the simplest form of labour differentiation, between the sexes. We know that it is more difficult for women to get an education than for men. But this is not because of the poverty in low-income countries alone. In this context, the figures which Habte (1988: 9) presents concerning 'female enrolment rates' are relative. Access to education has much to do with cultural barriers and with the notions of what is considered suitable work for women, notions which are projected on women from a cultural perspective, and which they may or may not be happy with.

Within such a cultural context it is difficult to make women conscious of the fact that learning a trade benefits their liberation process. This becomes even more difficult if such a trade brings in less money than

being in the market place. Moreover, a market woman in Ghana is not a complete woman if she does not have any children. This is not only the way society sees women, this is how these women see themselves. This is of such importance that one always hears these women talk among themselves about their children and family, hardly ever about job satisfaction or career prospects.

In Ghana the occupation of a merchant is open and quite suited to women. It gives them status in the eyes of men and of society in general. This is clearly different from the situation in India, with its many different cultural groups.

A metropolis such as Calcutta (India) attracts many culturally different groups. Verghese (1988) takes for example the difference between the Bengalis and the Rajasthanis, who live and work in the same city. The Bengalis are the original local and traditionally established inhabitants of the area. The Rajasthanis are a recently immigrated people from Western India whose cultural background is clearly one of business and of merchants. This cultural background and the life-style of both groups determined their attitude to education as well as to the labour market.

In India a woman's place is at home, in the kitchen. Women are not part of public life. In the well-to-do circles of both aforementioned Indian groups it is customary to give daughters an opportunity to study. Any secondary education, however, is stopped as soon as parents see a way of marrying off their girl to a suitable match. Marriage brings an end to any education. And as a stranger in a new home, the girl first has to prove herself in the eyes of her mother-in-law.

As long as girls are in the care of their own mothers, the Bengalis show a clear preference for a prestigious education for their daughters: university. For Bengalis as well as Rajasthanis any vocational training is simply 'not done'. According to Verghese (1988: 3), this is on account of the age-old values which have been transmitted from Vedic education. This makes it unthinkable for a girl to have her education complemented by an education out of her own home, not to mention job training. This used to be for men only.

This is not only a problem for India, but for most of Southern Asia. In his contribution on job-oriented on-the-job training in Pakistan, for instance, Tomesen (1988) pays attention exclusively to job-oriented courses for men. Just as much as Hindu society in India keeps women from vocational training, Islamic society in Pakistan does so too.

Yet attempts are made to change these strongly religiously, philosophically and culturally determined systems of values and standards. In Nepal particularly the Cheli Beti programme, part of the Seti project, is a good example of non- formal education activities which aim at giving girls a leading role in processes of social and cultural change. Cheli Beti is the name for marriageable girls between six and 14 years. And there are

thousands of those in the rural areas of Nepal.

These girls get no formal education, and are mostly illiterate. The main dilemma facing their parents is that, on the one hand, they have to raise the girls to be fully prepared productive housewives, but, on the other hand, they have to marry off these daughters as soon as possible in order to save food for their own homes. The Cheli Beti programme, therefore, consists mainly in teaching the girls from the poor classes of the population and from the lower castes some homework and productive skills, and, if possible, to read and write.

Apart from that attention is payed to personal hygiene and hygiene in general, manual dexterity and information on food and agriculture. The girls are also taught some income generating skills so that they may move about a little more independently. The transmission consists on the one hand of practical skill training and on the other hand of more creative and cultural elements, such as games and the educational songs on things taken from life *(dauda)*. This is obviously basic education. It is hoped that these young potential brides will spread their newly acquired knowledge, after leaving the home, to the wider basis of the community, and thus slowly change the life-style of the rural communities.

In China, too, the woman's position in the labour market is precarious, because the majority of the women have had less education than the men, as well as less technological training. China before 'The Great Leap Forward' (1958) had a deeply rooted and generally accepted ideology: 'Women without talent are a virtue.' Therefore it is no great surprise that in those days ninety percent of the women were illiterate, and girls of a school-going age did not receive any education. Marriage was the only thing for which girls left the home. Since 1958 the position of Chinese women has undergone significant changes, politically, socially and culturally, particularly because of the government's attitude towards the institution of the family. It was attempted to break down the power of the patriarchal system. There is compulsory education for girls now, and they are encouraged to continue their studies.

Yet ideas on 'women's work' and specialities have prevailed until this day. And according to Kan Feng Min (1988: 7) these ideas still spring from a traditional attitude towards girls and young women. This is why their access to certain courses and therefore to certain areas of the labour-market is still limited. This is particularly the case with technical job training, which traditionally did not enjoy much prestige in China.

The girls' choice as to the type of education is still influenced by traditional ideology, the force of customs and traditions, primary education, pressure from parents, economic reforms, job opportunities, personal interests and the reputation of the trade. In spite of the government's heavy criticism, Chinese society cannot be rid of patriarchal ideology. According to the traditional ideology men are superior to women. Therefore parents press their girls to choose traditional 'women's'

occupations, such as those of a nurse or beautician, which men usually look down on. So these are the subjects which are part of women's job training. Girls are withheld technical job training.

Just as in India, the Chinese rural population (90%) still clings to the opinion that girls are only temporary members of the family who must be married off as soon as possible. At home they only cost money. So there is a tendency to take the girls away from school and put them to work in the economic activities of the family. The percentage of drop-outs among girls, therefore, is highest in the rural areas.

Deeply rooted opinions as to accepted 'women's' activities and occupations are also found in Latin America. In this context, Van Dam and Peter (1988: 8) have spoken of the 'gender-specific role' of women in society. This leads to the social, cultural and political oppression of women, and very much determines the women's identity within society. Women are not expected to take active part in organizational work of political parties and trade unions.

That is why a number of popular education institutions have started special women's programmes aiming at supporting women to build a new identity, creating the ability to change their living conditions by means of productive programmes which train their technical and organizational skills. These are typically those skills which clash with the traditional gender-specific identity of women. Only in this way can it be shown that these women's programmes are more than a freak of fashion, and that emancipation is more than paying lip-service to changing the inferior position of women.

(2) Indigenous knowledge and skills: not to be underestimated in a productive life

All over the world we find countries with a cultural mainstream which determines the policy as regards the national process of development, side by side with, cultural counter-streams at a local level. That is why in small cultural and ethnic enclaves ideas on education, culture and productive life are different from those of the government. According to Barsaga (1988: 15-16), these enclaves use a holistic rather than a 'compartmentalistic' view in order to face the social as well as the physical surroundings. The transmission of knowledge, skills and values cannot be isolated; they are equally important.

Moreover, those ideas are not inspired by social development and progress or social change, but rather by social continuity. Culture, that is to say, standards, values and ideas contribute to the determination of what is locally understood by 'economic productivity'. Any future, however, characterized by changes which can be planned, plays a neglible part. The urge for change is often smaller at a local level than at a national level.

Tomesen's experiences (1988) in Pakistan show that vertical technical job training is not that much of a problem. Skills are learnt, and everyone

uses them as he pleases. Training basic skills such as elementary planning and management is a much more important problem especially for the underprivileged. Applying these basic skills has no longer to do with social continuity, but with looking forward, with advance, with planning, marketing and daring to take risks. Generally this is most uncharacteristic of the way in which the 'poorest of the poor' of a local rural community operate traditionally. A future is not so much planned for themselves, but for posterity. All other aspirations are about a harmonious relationship with the physical and social environment.

Although the extent of labour differentiation and professionalization in the local community is usually lower than outside, there are, apart from the regular farmer or fisherman, indeed a number of productive and service specialities, such as the blacksmith, the healer, the midwife or the artisan. Skills are taught by means of on-the-job training, and handed down from master to apprentice, usually from father to son, or, as in Pakistan, from *ustad* to worker. Pre-eminently the senses are effectively trained for specific observation. In agriculture and food preparation the learning principle of observation and imitation is used, in which the method of trial-and-error plays a major part.

An indigenous learning system in these cultures with a holistic world view aiming at social continuity is, according to Tunsiri (1988: 1), "a learning system based on traditional customs and/or traditional media". Still, in a country such as Thailand there was endogenous vocational training before 1923, including 'military schools' and 'schools of arts', under the patronage of temple and court. Just as in China there were special training courses for those aspiring to an official career.

This is not to say that within certain professional specialities there was not an open mind as to modern influences. The women ballad singers in Thailand were the first group to start a well-organized trade union in the twenties. According to Tunsiri (1988: 3), here we see how a slow process of social change is started, in a profession having strong indigenous roots, towards the endogenous development of a (national) promotion of workers' interests, without there having been any direct exogenous interference.

Tarwotjo (1988: 1-10) shows how the imagery of a profession can remain unchanged through the years for the local population, whereas, at a national level, work is being done to bring about a change in this imagery. In the late sixties, in a small out-of-the-way village in Java (Indonesia), he studied the views of the community on the teaching profession. Teachers were respected because of their verbal skills and their functions, but at village meetings their votes did not really count as they did not possess any land round the village. They were, and still are seen as the outsiders of the village.

Twenty years later (1988) he repeated his research in the same village and arrived at the conclusion that in spite of the government's efforts and

the socio-cultural changes in the village, the population still had the same attitude towards the teachers. Whereas somewhere else in Indonesia women teachers can work, there still were none in this village. Because of the traditional views on the relation between men and women, women teachers are still not accepted in the village. Women belong in the kitchen, in the fields, or in the market- place, but not in front of a class.

Still teachers, culturally speaking, are seen not so much as the formal instructors of local children, but as potential leaders of the community: a role they can never realize, as these 'landless' have no say in the village council, where traditionally power rests with the village chief, a man who owns a great deal of land. This unrealized expectation of the role of the teacher makes the status of the profession rather ambivalent.

(3) Education and productive life of the underprivileged in the city and in the rural areas

The vendors and hawkers who are part of the underground economy of the metropolis Manila belong to the most impoverished population groups in the Philippine Islands. Their earnings are spent the same day on their daily basic needs. In this informal sector of the Philippines economy these people have certain significant characteristics in common. Most of them use the local spoken language, *tagalog* (at home and when working). Theirs is a minimal existence. They can move about quickly, and they live by selling their merchandise, mostly food, one piece at a time. There are a lot of rural migrants among them trying their luck in the cipital. They own a number of (manual) skills which will not earn them any money in the city as there is plenty of labour supply.

They survive in a society which can no longer provide for them. According to Gatchalian (1988: 18) it is the underprivileged groups of society that end up in this kind of work, such as women and children and other underprivileged. Because of the illegal nature of their work, they grow alienated from society, and they adopt a distorted view of authorities and government. Particularly the young are able to hold out longest in this line of work. Only the young are fast and fit enough to hunt after cars and buses for small and fast sales. They collaborate, if at all, within their family. And even among themselves their manner of selling their merchandise one piece at a time meets a need. One piece of candy can be bought if one does not have the money to buy the whole bag in a shop or in the market place. As such they form a subculture with an identity based on survival. They do not only live socially isolated lives, but also culturally isolated between a rural and an urban culture.

Kla Somtrakol reports on a project in Thailand aiming to give the inhabitants of the Cambodian borderland a better economic basis by means of skill training. In this manner the Thai government hopes to stop the massive migration from this disturbed province. The programme's first evaluation showed that the approach chosen did not produce the

desired results. Structured courses in a central location emphasizing the teaching of technical knowledge and skills did not work in this context. Most of the people having followed the course appeared to lack the additional skills to start a business on their own. The young among them appeared to try their luck in the cities, convinced that their training would get them a job there.

Changes were made in the programme, and in two places. To the regular technical skill training courses were added non-technical components such as basic planning, marketing and preparing for entrepreneurship. Other courses were started in the villages, based on the learning needs as formulated by the villagers themselves.

An approach fully taking into account the learning needs of underprivileged groups in rural areas is the Delsilife project. In the end this approach aims to improve the quality of life of these underprivileged groups by encouraging their self-reliance. In order to do this, emphasis is laid not only on learning a number of occupational skills (vertical skills), but also on problem solving skills (horizontal skills) with which to recognize a number of problems in future, and to solve them autonomously. Only training both sets of skills will, in the long run, give the poor in the rural areas a chance of improving their living conditions independently and structurally, without any further outside interference or help.

Here training is an effective means of change. According to Socrates (1988: 4), it is this combination which gives the poorest among the poor in the rural areas the chance of improving their productive life and reinforcing their cultural identity.

Despite the fact that Delsilife has an element of participation, it naturally remains an intervention system, which it makes no bones about. The people taking part do not only benefit from the project, they also have to work very hard in order to make it all work. This means that when learning occupational skills, for instance learning to grow mushrooms, the individual must be prepared to learn how to sell the products of these skills. This then is the aim of the cumulative effect of each training programme of the Delsilife project. This means that the growing of mushrooms is not enough. Mushrooms need to find their way to the market. So transport is needed. In this way the start of one productive sector leads to the birth of another.

New income generating activities of underprivileged groups are viewed with envious eyes by the established resident economic leaders of the community. Often traditional village leaders are eager to assume control over such a project themselves. Delsilife has tried to put a stop to this, mainly by translating indigenous basic needs into endogenous learning needs. According to Kla and Tunsiri (1988: 3), such a need is that everyone in a Thai community likes to look attractive, in clothing and hairdo. And there are a number of villagers prepared to learn the

skills of making clothes and hair dressing. Here, at a local level, is a market for learning a trade.

But as neither the potential consumer, not the potential producer has the money to satisfy this need outside the village, there is a kind of 'learning vacuum' to which the Delsilife approach responds. A similar vacuum in the market mechanism was also seen to come about in the underground economy of the Manila metropolis. The Delsilife approach, in fact, really fills such a gap in the market by giving people job training. Not only technical skills are taught. People are not just taught how to make fashionable hairdos. They are also taught those management skills needed in order to get to know the market mechanism, and to deal with it adequately.

The question remains if this informal approach of education really benefits the emancipation process. It is rather a straightforward method. Any gap in the market must be filled, in a manner of speaking. But it is not quite so straightforward for the potential producer. The poorest in the rural areas first must regain their confidence before they dare start such risky activities. Technical skill training alone will not do, at least a training of basic life skills is needed, if the technical skills learnt are to prove their viability in the long run.

In that sense Tunsiri (1988: 1) is quite right in claiming that the Delsilife project is partly an effort to adapt the indigenous learning system to modern aims. Maybe it is even better to claim that the Delsilife project is concerned with making agents within the indigenous learning system sensitive to endogenous processes of development as well as to a more general context of development.

(4) Culture, attitude and productive life

According to Cheng (1988: 1), Hong Kong is one of the few countries without unemployment. He suspects that this is not so much the result of a flourishing economy, the right forms of education, or the rightly attuned labour market. He rather believes that the lack of unemployment is culturally determined, particularly by the way in which the individual relates to the community. This is shown, for instance, by the curriculum used. The conformity strived after in the curriculum on the mainland of China reflects the idea - although pupils are born with different talents in different social backgrounds - that they still ought to be able to reach the same target. Thus individuals must adapt to the school system as well as they can.

The opposite point of view is used in the North Atlantic world. Here it is assumed that society makes as many provisions as possible, such as different curricula, in order to meet as much as possible all individual learning needs of all students. In the North Atlantic world pupils have different curricula, and finally reach different learning goals. In some Asian countries, such as China, Japan and Hong Kong, pupils have the

same curriculum and they are expected to reach the same learning goal. The formal system of education here has the point of view that everyone has the right to become 'champion'. The testing moment comes when every student has to meet the same criteria in order to get a certificate.

Especially for China this is not a new idea. The old state examinations for public servants used the same criteria for all students. The learning process was a race resulting in a certificate. People respected the same set of criteria for examinations; they respected competition. Unlike in the North Atlantic world, in China this race does not so much emphasize the development of the diverse individual talents, as the prestige and the job in which it results. Individual learning needs, therefore, are not considered relevant, and children are raised in conformity with the social norms, the social system and the education system.

This difference between East and West is remarkable. Chinese children's toys represent the ready-for-use high-tech world of grown-ups in a nutshell. In the North Atlantic world toys are designed for the child to bring creativity and imagination into play. The same difference is later observed with vocational counselling. The North Atlantic world takes as its starting-point the needs of the (future) person seeking employment, whereas in China the emphasis is on information about needs formulated from the point of view of the labour- market. Here personal preferences have no real priority. The labour market limits the number of options for the individual. A deeply anchored relation between job and personality is out of the question.

This is linked up with a number of deeply rooted values in Chinese culture, such as the strong family bonds (especially in trade), a strong sense of hierarchy, a reliance on the teachings of Confucius, openness as to making one's way up the social ladder, and education as the only means of social mobility. Individualism is out of the question and in no way agrees with the individual's self-development as prevailing in North Atlantic cultures.

(5) Concluding remarks

Such differences in attitude as regards education are bound to influence development work, with its educational component. The way in which an expert sees a problem is not always the way the local population do. Moreover, the North Atlantic approach of problem solving is usually 'compartmentalistic'. This is diametrically opposed to the 'holistic' approach of problem solving as is popular in many cultures in developing countries. According to Kane (1988: 7), initiatives of non-formal institutions within the latter approach have more viability: "they can assemble all the necessary support systems, of which training is only one part, in an unbroken chain, to meet an end, such as setting people up in self-employment". Training and education programmes can take advantage of this.

Apart from this difference between a compartmentalistic and holistic view of man in his physical and social surroundings, another difference is observed between experts and the local population as regards culture-specific knowledge and skills. Kane (1988: 9) points out that non-rational elements are typical of each culture and hence of each decision-making process "not susceptible to change by logical or 'scientific' arguments". Kater (1988: 3), however, rightly asserts: "what is called scientific today may (...) not be recognized as such tomorrow". And the examples he gives, mainly drawn from medical science, are indeed convincing. That is why he prefers the expression 'knowledge within its cultural context' to 'scientific knowledge', a term any expert in any field makes great play with.

For North Atlantic experts and donor organizations such claims on the relativity of culture are most unsatisfying. Equivocal statements jeopardize forecasts on the success of an investment in projects and programmes. These statements make it impossible to give an unequivocal answer to the question how education, culture and productive life relate to each other. Nobody will deny that the three are inseparable. All symposium papers dealt with in this survey are in search of the connection, but so far no clear answer can be given to the question how to combine and integrate the three aiming at the most harmonious development possible in society.

4.
Education and culture

The links between education, culture and productive life are strong. Education is seen as a process through which a new-born individual becomes an integrated member of the community. It is the main agent of transfer of a culture from one generation to the next (Dubbeldam 1988:8). The culture of a society determines the form and content of its educational processes. Through education the productivity of a nation's citizenry is improved, and by stimulating and developing intellect and creativity education can promote the development of culture as well as productive life.

Following CESO's position paper, Dubbeldam uses a definition of culture taken from the anthropologist Linton. In this definition culture is seen as:

> "The configuration of learned behaviour and results of behaviour whose component elements are shared and transmitted by the members of a particular society, in a continuous process of imitation and intended transfer as well as of adaptations and alterations as a result of its changing environment and its members' creativity."

Dubbeldam finds this definition a useful starting-point for his argument. Although it rather stresses learned and transmitted behaviour and the results thereof, in his paper Dubbeldam treats culture as the way in which people behave, feel and think (1988:1).

It is not surprising that, in the course of his argument, he pays attention to ideal and real patterns of culture. Culture is lived and experienced in a process of social progress and cultural continuity. People do not readily admit that their culture is changing. Often changes occur in real cultural patterns, in what people actually do, while society in terms of ideal cultural patterns, what people think about their culture, sticks to old opinions. Society prefers to 'think' in terms of cultural continuity. It takes time for incidental changes to take root, especially when those changes affect values and norms, for example with regard to religious or moral affairs, opinions about the family and gender relations.

Through education the members of a society obtain factual knowledge, normative systems and an analytical framework needed to

successfully participate in that society. Every educational system has its own 'hidden curriculum'. It is bound to be based on implicit ideas about the role of education, ideas stemming from what people regard as the ideal culture. Hence, no transmission process can avoid imparting certain values and norms which are not shared by everybody involved. Especially younger generations tend to oppose the 'old-fashioned' assumptions on which the educational system is based. One such an implicit idea is that a diploma guarantees a good future, that a diploma automatically leads to a job. This no longer holds true.

A number of these expectations, implicit ideas, values and norms are basic not only to education, but also to development processes in general, of which education and training form part. In order to unveil these cultural aspects which are taken for granted, Kane (1988:8-9) advocated the use of a definition of culture in development studies which takes ideas rather than behaviour as point of departure. Especially when the aim is to examine the 'meeting' of ideas, views, options and expectations of the North and the South respectively in projects and programmes of development co-operation. Following the anthropologist Keesing, she regards culture as knowledge, a system of shared ideas, concepts, rules and meanings which form the basis of, and are expressed in the lives of the members of a society. These shared ideas determine people's behaviour.

Kane illustrates this with an example. She takes the ideas which society has about 'femininity', and says: "What makes a man a man or a woman a woman are basic cultural premises in any society" (Kane 1988:9). Many development projects aim at improving the position of women through educational programmes which should give them better chances in the labour market. However, as explained in chapter 3, every culture has its own opinions about what is considered to be 'appropriate' work for women. In Ghana it is quite acceptable for women to sell goods in the market, in Pakistan it is not. Even within a culture ideas about this may vary, for example between the sexes.

(1) Education, culture and society

Although the close interlinkage between education, culture and society is quite apparent, its nature and scope are less clear. A number of questions immediately come to the fore: what exactly constitutes this interlinkage between the three? What factors influence its character, and how can one combine and integrate the three for a harmonious development of society?

The interlinkage is multifaceted and complex, growing even more complicated by the rapidly changing world in which it operates. Societies do not live in a vacuum but are linked to the outside world through economic, demographic and technological developments. Societies react to new situations and influences, inevitably resulting in changes in social and economic relations, cultural patterns and educational systems.

People of a particular society to a certain extent share the same norms, values and feelings of belonging. These features, which are not natural characteristics, form part of the culture of that society. Societies are seldom homogeneous, more often consisting of a conglomerate of groups which share some cultural ideas and behaviour, but at the same time differ in many others. It is more realistic to speak of a configuration of sub-cultures gathered under the umbrella of a society.

(Sub-)cultures are in continuous change, although its pace may be slow, as a reaction to external influences and contacts, changing environments and because of the 'creativity' of its members. Some aspects of culture are more susceptible to change than others. Adoption of new material objects, tech- nologies and behaviour occurs fairly rapidly in comparison with strongly held beliefs, norms and values. The latter category belongs to the realm of ideas, and is therefore more elusive and difficult to identify (Kane 1988:12). Ideas about the ideal family size and the role of women in society are examples of such beliefs, and in the context of education these beliefs have far-reaching consequences for the expansion of the school system and the schooling opportunities for girls.

In this complex field of shifting economic conditions, changing societies and cultural diversity education has to play roles which are sometimes incompatible. It has to act as an 'agent of cultural transfer', 'facilitator of economic development', 'unifier of cultural pluralism', 'custodian of values', and 'instigator of individual curiosity and creativity'.

Flexibility and diversification at first sight seem indispensable for education to be able to cope with such a diverse and complicated task. But practical considerations immediately prompt the following questions: do political aspirations and economic conditions allow for such flexibility; what sort of flexibility and diversification will prove effective; what factors determine its implementation, etc.?

The papers presented and discussions held during the conference explore the interlinkage described above and related problem areas. Suggestions for research are put forward which may contribute to clarifying these issues and ultimately may lead to the improvement of the relevance of educational programmes as well as the effectiveness of educational delivery systems in developing countries.

The discussion about the relevance and effectiveness of education can be structured along a number of dichotomies such as colonial versus traditional models of education, national policies versus local culture and uniformity versus diversity. The implications of these dichotomies do not only have a bearing on formal education but touch upon non-formal and informal education as well. Themes that cut across the fields of various forms of education are those dealing with the formation and transfer of values, teaching methods and materials, and the tapping of traditional knowledge and learning processes.

(2) Educational systems: colonial versus traditional models

Most developing countries have inherited and adopted a colonial education system, thereby neglecting existing traditional forms of education which might be more effective channel of knowledge transfer because of their indigenous character. Verghese mentions in her paper the replacement of the traditional Vedic system of education in India by the British colonial system; Visser and Pereira the development of an educational system in Mozambique which was largely conceived with the examples of developed countries in mind. These Western systems not only perpetuate Western values, but are also biased towards industrial development needs, and in that context tend to replace traditional views and attitudes by scientific ones.

Traditional models are embedded in the indigenous culture, and therefore are culturally sensitive both with regard to content as well as learning processes and methods. The Vedic system for example, aimed at the development of intellectual power and moral strength, enabling the student to achieve self-sacrifice, salvation and correct social conduct. Apart from spiritual subjects the 'curriculum' included the study of literature and language, astrology, law, geometry and arithmetic, astronomy, anatomy and botany. According to Verghese (1988: 2-3), education was a mode of life for the elite since women and the lower classes were excluded, and pupils were in the constant company of their **guru**, who, in the absence of books, was a regular store of knowledge.

On the other hand, traditional models of education do not seem equipped to effectively cope with demands set by social, economic and technological realities of the modern world. Colonial models of education do provide these opportunities, at least in principle, but convey a different cultural outlook and carry a burden of negative connotations linked to the colonial past. In most cases Western education was introduced by the colonial rulers to create a class of local civil servants to act as interpreters between the colonial government and the masses.

Although opinions are still divided about the exactness of the labels 'traditional' and 'colonial', there is a general feeling that there are advantages and disadvantages to both models. The sweeping notion 'preservation of traditions' may not always be a justifiable goal in education, 'traditional education' is not by definition relevant in all its aspects, and culture has to be viewed in a dynamic context of changing environments.

(3) Content and process: national policies versus local culture, uniformity versus diversity

Many developing countries are facing dual problems of education. They are forced to simultaneously handle quantitative expansion and qualitative improvement. Quantitative expansion is hampered by high population growth rates and dwindling financial resources. Quality improvement

touches upon efficiency and effectiveness of delivery, and relevance of the curricula.

Quality and relevance are relative terms, and what a national government considers to be good and relevant education might differ considerably from the opinion of the user groups. This can be illustrated by a quotation from Barsaga's paper (1988: 1). He portrays the strong views of three tribal communities in South-East Asia towards the formal and even non-formal government education programmes as follows:

> "(...) in some instances it was perceived as a nuisance, an unnecessary intrusion into their social life. This negative perception towards education is partly attributed to poorly designed curricula; culturally insensitive instructional approaches, methods and techniques, and materials; and inability of school administrators and teachers to adapt education to the community's structures."

Other authors report on the same discrepancy between national policies and local needs, cultural identities and expectations in their respective countries.

On the one hand the objectives of the national education systems reflect an ideal image of the citizen of that society, and ideal ways and methods to educate the (young) people. On the other hand they are, at least in their implementation, supposed to be in line with the dominant political philosophy and practice in the country and the political interests of the learning groups (Dubbeldam 1988:15). With regard to the content of the curricula, in many instances there is a wide gap between what is taught at school and the real economic needs and life-styles of the local communities.

Among a great many educationalists diversity in policies, systems and practices is favoured as a way to make education more user-specific and to preserve cultural identity. However, as has already been mentioned above, this not always coincides with prevalent political and economic realities in developing countries, nor is this ideal shared by all nations in the world. In many countries there exists national uniformity in educational systems, for different reasons. In Indonesia, as is described by Riberu (1988:12), the government uses this uniformity deliberately to forge a national identity. Other governments use it as an instrument to achieve uniform educational standards and certification, often supported by economic incentive systems. In a number of countries in South-East Asia diversification of the educational system is opposed by nation-wide views on the role of education.

In general, flexibility is more easily achieved and accepted in the non-formal sector, where the influence of certification is less significant. It is in this sector that the community and learners have opportunities to have a say in the objectives, the content and the format of a particular curriculum.

The dichotomy of uniformity versus diversity requires further research to clarify the possibilities and effectiveness of more flexible and diversified educational systems. In this respect the participants of the symposium posed the following questions: what is the optimal balance between uniformity and flexibility? How can flexibility be achieved in formal and non-formal education? What are the effects, implications and consequences of uniformity versus diversity on the quality of education? To find answers to these questions it was suggested to develop an experimental curriculum model that strikes a balance between national and local development needs, respecting local culture.

(4) Values and value education

In the discussion of values and value education normally the 'traditional', the 'old' values are honoured. There is little knowledge or appreciation of new values, if their existence is acknowledged at all. In most forms of formal education value education is neglected except in cases where power groups intend to impose their values and norms on the learners.

Fig. 1: Research scheme 'Value Education'

I. GENERAL CONCEPT:

- interaction between formal, non-formal, informal system at local level (daily life level)

⇩

- effects on local level of different value systems (external, national, local value systems)

⇩

- actual problems caused by the different conflicting value systems

⇩

* indicators: women, children, drop-outs, minorities

⇩

II. GENERAL RESEARCH ISSUES:

1. Transmission of values (implicit and explicit values):
   a. production of differentiating effects: teacher attitudes, textbooks, exams, certification;
   b. comparison between parallel systems: formal, non-formal, informal.

2. Effects of transmitted conflicting values:
   a. effects on attitude towards education: rejection, adoption;
   b. effects on social behaviour: use of arts, leisure, drugs, etc.

Every form of education, each educational event conveys values, explicitly as well as implicitly. Values are incorporated in the educational system, the curriculum, the teaching methods, the media, the teacher. The values adverted explicitly reflect those held by the designers and perpetuators of the system, and are not seldom used to try and establish a uniform set of values among the citizens. The case of Indonesia was referred to above.

Less explicitly, though not less pervading, are those culturally defined assumptions, attitudes, perceptions and relationship patterns that formed the basis for choosing a particular educational system, teaching, method, medium etc.

Of course the users of the system and programmes have their own sets of values which may or may not coincide or clash with those conveyed by the education provided. These local values determine to a considerable extent people's opinion of the 'national' education system, as well as their level of involvement and participation in it.

In many countries women's access rates to schools are low, which can largely be attributed to local beliefs about the relevance of education for women. This has been demonstrated in chapter 3. Society holds definite 'images' of femininity, based on strong ethical and moral values. This 'labelling' occurs, as a matter of course, with any specific group in society: women, youth, landless labourers, children, girls, peer groups etc.

As was mentioned in chapter 3, values not only play a considerable role in determining what sort of learning is considered appropriate for a person, but also in determining the practical modalities for participation in a particular course. This is especially the case in non-formal and adult education programmes. Kane (1988:9) talks about the "non-rational elements of culture" when she refers to the case of women in Zambia and Ghana who are interested in improving their standards of living by acquiring skills, but want this learning to take place in a way that does not affect the execution of their daily duties. Learning ought to take place "within the specific sets of premises which make their lives worthwile".

One paper presented to the Symposium, written by Riberu, concentrated on the various aspects of value education in Indonesia. Within the process of further scrutinising research priorities identified, state-of-practice reviews on value education in Indonesia, Malaysia, Philippines and Thailand were brought under the general attention - as well as the regional synthesis which is currently being compiled by SEARRAG. A Directory of experts in education research in the region is available and will constitute a substantial tool in the identification of

suitable partner institutions in the region.

From these examples it is obvious that values are explicitly as well as implicitly intertwined with education in its broadest sense, and they have considerable consequences for its content and delivery, as well as for the acceptance of, and participation in educational programmes. However, the participants of the symposium noted that there is still a considerable lack of understanding on how values are being formed, nurtered, sustained, reformulated and lost in different cultures. Basic comparative research in this area is recommended. This research should furthermore address itself to the following questions and areas:

- What are the differences in the conceptual frameworks of values of developed and developing countries respectively (as reflected in educational systems, accommodating the research on cognitive structures of the learner in a particular culture)?

- What values are transmitted, and how are these transmitted in the formal and non-formal systems?

- How can values be taught? What strategies are effective in the transmission of explicit values? What implicit values are hampered?

- What values are insidiously developed, transmitted, or influenced by: textbooks, examinations, organizational methods and procedures, school policies in general, and specific teaching/learning techniques?

- An analysis of the relationship between values learned at school on the one hand, and those learned at home or reflected by society on the other hand (e.g. media, government bureaucracies and other social institutions).

- An analysis of the relationship between values transmitted through education and social change.

(5) Educational materials and media

The participants of the symposium acknowledge the importance of educational materials and audio-visual media in the various learning processes, formal, non-formal as well as informal. Educational materials are indispensable aids to facilitating knowledge and information transfer by the educator in any learning event; modern (mass-) media make possible the efficient and large-scale distribution and broadcasting of information and curricula. This latter feature inspired in Habte (1988:17) the folowing remark:

> "How could we encourage the use of a wide range of technologies for improving the quality and availability of education and training? It would seem that more research and experience are needed on the

applicability and sustainabiblity of proven technologies (e.g. radio) and the effectiveness of newer technologies (such as interactive video discs in developing countries)."

In this respect Jennings's paper on distance education provides a clear insight into the possibilities and problems in the use of satellite and telephone connections for the implementation of a Certificate in Education programme in the West Indies. Although problems in the practicalities of delivery still need to be resolved, the results of the students compare favourably with those following to on-campus programme.

It was noted that there is extensive literature on the use of media in various educational contexts all over the world, but what still lacks is a clear insight into the effectiveness of the media vis-a-vis specific contents, learning objectives, learning contexts and user groups. The participants therefore stressed the need for an integrating review of researches on the effectiveness of various types of media (i.e. indigenous, electronic, printed, etc.) in teaching and learning in developing countries. This review would include the utiliation of media in different fields of education in various cultural settings, as an instrument for raising awareness among rural people, and as a research instrument. Attention should also be paid to the effects of media on formal education and on national development. How effective are media in maintaining or enhancing culture/values?

It was also acknowledged that media are expressions of, and reflect culture, and that they convey and make use of an imagery which explicitly as well as implicitly reveals the values persistent in its culture-specific context. These factors considerably influence the effectiveness and impact of media in various cultural settings, in a positive as well as in a negative sense.

(6) Indigenous learning and traditional education

Six authors contributed papers on indigenous learning and traditional education. Tunsiri argues that present-day schooling is not supported by or rooted in the learner's cultural environment, and that hence, since the indigenous learning system is part and parcel of the cultural setting of the society, it would be more efficacious in the educational process.

Barsaga's paper gives insight in the indigenous learning systems (ILS) of three ethnic groups in South-East Asia. The common characteristic of these systems is that they are firmly embedded in the enculturation and socialization processes of the communities, and therefore are inextricably linked to the lives of the people. ILS are spontaneous, not sequential; emphasis is on life-long learning; the reward system is anchored on the intrinsic and social value of learning; learning is delivered by social groups, is community oriented and cross-discipline based (Barsaga

1988:14).

The other papers on indigenous learning, like those of Patmo and Epskamp, stress the effectiveness of apprenticeship schemes as traditional learning methods in various cultural settings. They highlight the high status attributed to the profession of the instructor, the 'master' in those societies. A master enjoys tremendous respect, teaching is regarded as a privilege and it is only the best in the profession who teach.

Although these accounts support the view that traditional forms of education are effective in their local context for specific purpose, the authors are less sure about the utilization of indigenous learning systems in other, less traditional learning contexts. Patmo indicates the need for further research to find out whether traditional learning methods are also relevant and applicable to current learning procedures, i.e. the transfer of modern technological and economical knowledge and skills. Bangura (cf. Barsaga) states that indigenous learning systems will unavoidably fail in responding to the new emerging needs of the community which they serve, because ILSs are to adapt learners to existing conditions and ways of life, often neglecting the future characterized by change. Barsaga therefore sees the role of ILSs as a complementary one to the formal and non-formal education system, a view which is shared by Tunsiri (1988:6): "It is recommended that more research should be conducted into various aspects of indigenous learning systems in more detail with a view to assessing future possibilities for their integration into the educational system".

This research must take into account the cultural specificity of indigenous learning and knowledge systems and its implications for the applicability of the research findings. How can formal and non-formal education systems accomodate indigenous learning and knowledge systems at economically aceptable costs?

Kater, in his paper, suggests two types of research to tackle this problem. The first should focus on the identification of those indigenous elements in learning and knowledge which will be applicable to a sufficiently great area or target group. The second type of research should aim to develop research methods to be applied by local educators in the identification of local knowledge for integration into regular educational programmes.

Other suggestions for research in this field were brought up during the discussions. A first suggestion concerns case studies on cognitive structures underlying the perceptions and logical frameworks of a culture. These studies should reveal the characteristics and scope of these structures and their implications for learning and understanding those educational subjects which have their origins in other cultural systems (e.g. science and mathemathics). The results could be applied to facilitate the teaching of cross-cultural forms and subjects of education.

A second suggestion is to conduct case studies on indigenous

leadership and management systems. These studies are to provide suggestions for the adaptation of Western-inspired school management systems to the locally prevalent practices of organization and management.

(7) Non-formal education

All papers and discussions on non-formal education stress the need of projects and programmes to be user-specific, taking into account their cultural background, value systems, living conditions and learning needs. Education should be problem-oriented, locally based, culturally sensitive, and the outcome directly applicable. Accounts of apparently successful non-formal education approaches, like Delsilife in the South-East Asian region and Cheli Beti in Nepal, support these statements. In the Delsilife case, the approach gives the people the privilege of deciding for themselves what it is they would want to learn, or to undertake.

At the other side of the globe, in Latin America, the primary aim of popular education learning programmes is awareness raising, which should serve the oppressed in society. The participant of a learning group is seen as a subject, not an object, trying to achieve his own goals, and participating actively in the decision-making process (Van Dam & Peter).

Problems are inevitable, even in successful programmes. Socrates lists the weaknesses of the Delsilife approach: (1) the expectation of volunteerism, (2) no immediate funding is made available, (3) it is cumbersome, slow and totally unconventional. Although these weaknesses have not hampered the institutionalization of Delsilife - it has been integrated in the regular programmes of the non-formal education programmes of Thailand, the Philippines and Indonesia - they might very well have repercussions on the retainment of Delsilife's specific characteristics during a nation-wide dissemination (Boeren 1988).

This worry about the loss of characteristic features of a successful project during its transition to a larger scale is equally applicable to popular education, as in the experiences described by Van Dam and Peter, or to adult literacy programmes as mentioned in the paper of Ooijens and Van Kampen. A review of popular education programmes in South America, presented by Van Dam and Peter, shows the following weaknesses:

- a discrepancy between short-term activism and long-term social change;
- popular education is becoming too pragmatic; it lacks interaction with theory;
- a false principle of equality between educator and participants; the surplus knowledge of the teacher should be coupled with the democratic structure of the learning process;
- the emphasis has been on the participation process, and not on the results of the learning processes; consequently the methods were not in harmony with the aspirations of the participants

(Van Dam & Peter).

Because of the user-specific, culturally sensitive and applied nature of non-formal education programmes, the integration of indigenous/traditional knowledge and learning proccesses is a prerequisite. More than the formal sector, non-formal education programmes have experimented with the use of traditional media as educational techniques. Several papers presented by participants, such as Riberu's, Malekela's, Devkota's and Tunsiri's, mention the performing arts in this context. One example, that of Chambulikazi, reviews the use of popular theatre as a small-scale educative medium in non-formal education in Tanzania. Popular theatre has proven to be an effective instrument for awareness raising, and it ecourages horizontal communication (Chambulikazi 1988).

(8) Concluding remarks

The participants of the four-days session on 'education and culture' spent an entire day exchanging views about the cultural dimension of education programmes in the different countries in Asia, Africa and Latin America, as presented by the participants. There was a general consensus regarding the importance of the cultural component of development and the cultural aspects in introducing education. However, it was inevitably concluded that these aspects vary according to the different countries and even to the different communities within one nation.

The discussion focused at large on two central issues or problem areas: (a) in what way are national education systems related or contradictory to local education systems; and (b) how to develop general programmes for education and training that take into account local cultural settings?

These two important questions were taken into account in formulating some main research topics, especially referring to the field of non-formal education. It was concluded that research is needed to highlight factors that hamper or facilitate the planning, introduction and implementation of non-formal education programmes, factors that positively influence the effectiveness of the delivery systems and the impact of the programmes. More specifically the studies are to deal with the following subjects:

1. Research that will close the gap between the practice of non-formal education programmes and scientific theory, i.e. providing scientific foundations to educational developments of a practical nature.

2. Research which finds ways to enable the transition from micro-experiences to larger programmes or social movements, without loss of quality.

3. What features of the traditional culture (knowledge, values, learning processes, traditional media) can be included in the curriculum so that it benefits the participation and understanding of the learners, and how can this be achieved?

4. To discover the effective ways of involving the users in the planning and implementation of non-formal education programmes; to devise effective and reliable methods to establish learning needs.

5. A comparative qualitative study of the socio-economic and cultural factors in a community that facilitate or inhibit the introduction, acceptance and execution of non-formal education programmes. This study could be focused on a variety of groups, i.e. women, farmers, fishermen, industrial workers, slum dwellers, hill tribes.

5.
Education and productive life

The relation between education and productive life is based on the experience that education will contribute to the improvement of the quality of life. According to Dubbeldam (1988: 15) school education is assumed to improve the socio-economic circumstances of the learners by installing knowledge, attitudes and skills which can be applied in the work situation. In many developing countries programmes related to education and productive life are being implemented and there is a variety of ways in which components of education and production have been integrated. These programmes range from adjusted curricula within the formal education system to special or designed out-of-school programmes, mainly depending on the existing philosophy and the stated objective.

CESO's position paper elaborated upon the importance of the relationship between education and productive life:

> "(...) a person has to learn to be productive in the sense that he or she can produce food and goods but also make an active contribution to a harmonious survival of the community and good relations with the natural and supernatural environment. A person is therefore not only productive if he or she actually produces something materially, but also when he or she makes a contribution to the life of the community by social or spiritual acts. The norms, values and attitudes within a culture towards work affect not only the way people behave, even if they work in the modern sector, but by the same token the objectives, form and content of the training courses."

Especially the last part of this quotation from the position paper (1988:12-13) gives a clear indication of how culture-specific processes might be taken into consideration in studying the relation between education and productive life.

However, when society becomes more complex and specialist, knowledge and skills should also be developed to be able to keep pace with new developments in society. But how far should these developments go? In traditional communities the elements of knowledge required for work and production were learnt in conjunction. As the knowledge

present in society expanded and became more specialist, making interconnections more tenuous, a greater demand arose for forms of education specifically geared to work and production.

In this connection three types of categories of education are distinguished.

1. Those forms of education within which specific training and modest production may be accorded a place. Production is considered as additional activity and therefore has no effect on examinations and certificates.

2. Short courses geared to teaching-specific skills are developed or introduced. This type of learning is confined to theory and the ability to use certain instruments and materials, hence little scope is provided in the curriculum for general knowledge or for production.

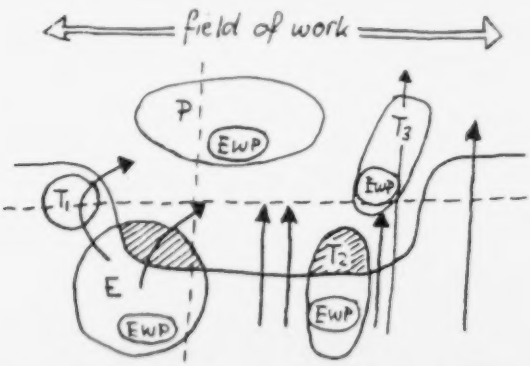
3. The training of skills or more general vocational knowledge. On this point many questions need to be answered, e.g. how adequate is the co-ordination of schools' programmes to the needs of a highly varied labour market? Is sufficient attention paid to insight, understanding of phenomena and processes, analytical capacity, attitudes towards the material, work, time, etc. alongside specific technical skills?

Taking these questions into consideration, the deliberations on education and productive life can be structured along the following main areas, together forming a framework for further discussion: (1) conceptual issues, (2) forms of education-with-production, (3) experience in education-with-production activities, (4) teacher training in the framework of education-with-production, and (5) financial and institutional implications of education-with-production programmes.

(1) Conceptual issues

A lively discussion emerged among participants concerning the concept of 'education and productive life'. Hoppers was asked to clarify the conceptual framework of 'education with production'. As shown in figure 1, he distinguished several types of intervention by 'education with production'. According to Hoppers the acquisition of social and cultural skills is broader than those specifically acquired for employment. Most children start in the educational system (E). But many of them do some work during schooltime. Here is an overlap with the field of work. The Productive circle (P) contains people who are ready for work. In here, they improve their skills. In the P-circle, production is basic, training is added.

Fig. 2. Types of intervention by EWP



Training circle T-1 contains graduates from primary school who get vocational training before entering the world of work. Training circle 2 (T-2) is about people who are already productive. It helps them to be more productive when 'Education with Production' is added, like in some other circles. The 'education with production' intervention improves the quality of each individual's possibilities in society. The forms under the horizontal dashes are about essentially training for younger people, the others are predominantly on production with additional training (for adults). Leftsided from the vertical dashes are formal forms of education. The others are non-formal.

The relation between education and production can be reflected upon by making a distinction between 'education for production' and 'education with production'. Education for production focuses on educating and training people to be productive and/or to perform better in their future working life, by developing in them work attitudes, making them aware of labour environments, and teaching them how to increase and improve production. This approach has a more general character towards productive life in society. According to Cabral de Andrade (1988: 1-2) it emphasizes the vocational side of education and aims at production as a final result, taking into account the qualitative educational requirements due to technological change. In this sense vocationalization makes education more practical and a better preparation for working life after school.

While the aim of education for production is more in the economic sphere and directed to the labour market, in education with production it is more in the social and moral spheres (though not excluding the economic dimension). Education with production focuses on the activities in school or training settings and according to the type of economy the

attention given to it comes from different angles:

- In developed countries, education with production essentially aims at improving the employability of the youngster and at easing the transition from school to work.

- In developing market economies, priorities for education with production are mainly related to two economic reasons (1) income generating efforts through selling goods and services produced by students to finance schools and training centres, (2) distribution of gains from production in school among the poor target group.

- In socialist economies education-with-production is an essential instrument in the effort to create 'a new society'.

Various experiences in the field of education-with-production (EWP) can be referred to. Hoppers (1988: 4) summarises them as "(....) the arrangements whereby a socially and economically meaningful component of education or training and one of production have been integrated within the same institutional setting."

The Tanzanian policy on education for self-reliance was directed at building an egalitarian society and emphasized the need to integrate mental and productive work (theory and practice). In her study on work experience programmes in Commonwealth countries Jennings (1988: 4) defines work experience as opportunities on a compulsory or voluntary basis for full-time secondary school students to engage in work as a part of their education programme.

As to the effectiveness of EWP programmes, there is a general need to examine the link between training in schools and job opportunities in society as this may have implications for the content of the curriculum and the methods to be used. Research on labour market outcomes of work related programmes should use quantitative and qualitative approaches to investigate how these programmes benefit pupils after leaving school.

Participants also stressed another important dimension in connection with the concept, viz. the cultural aspect. The concept of education differs from one society to another, with the implication that in many societies too many productive activities in the school curriculum are not acceptable. Productive activities are regarded as part of the world of work and not of education. Comparative studies on the relationship between EWP programmes and the cultural concept of education in selected countries (Africa, Caribbean, Latin-America, Asia) are therefore needed as well as a study of issues which create problems in the link between the school culture and work culture, both of which are influenced by the pervading national culture and socio-economic climate.

In his presentation Cabral de Andrade went even further than this

showing that education-with-production programmes varied in different countries, not only in their objectives and organization but also in their functionality. The problem in many countries is also how to implement education-with-production programmes. Cabral de Andrade mentioned that it is interesting to see how educationists react to the proposals of education with production. Those who are concerned about the risk of changing school into factory, insist on giving more weight to the pedagogical aspects of work, even if there are negative effects on economic output.

Generally it could be said that productive life implies meaningful work, therefore socially useful activities should be considered as productive work. Productive life contains an economic dimension (basic needs), a social dimenion (self-expression, gaining identity) and a cultural dimension (ethics and dignity).

(2) Forms of education with production

Cabral de Andrade's and Jennings's papers clearly indicate that the establishment of EWP programmes and experiments are justified by pedagogical, economic and social considerations. One of the main pedagogical aims is to create a balance between the academic and the practical parts of the curricula. The integration of theory and practice is made possible by a better understanding of the principles and scientific processes implied in the various types of work. Important social objectives are the relation between home, community and school on the one hand, and workplace on the other, and the development of a positive attitude towards manual work.

Economic considerations are the creation of employment opportunities for the participants or to find resources for financing the education and training, to raise an income for the students or their families, or to develop productive activities to satisfy the needs of the community. Many reasons could be added and it depends on the type of economy whether pedagogical, economic or social aspects will receive more attention.

Within the formal education systems the teaching of skills is one component but at the same time knowledge and values remain of great importance. In the non-formal education and training programmes there is a more direct focus on the acquirement of skills in order to perform a specific job. It is often difficult to distinguish formal, non-formal and informal activities or to make mutual comparisons due to activity overlap of various bureaucratic agencies working in the same field.

The discussion on forms of EWP raises the question how to reach the target group, when neither formal nor non-formal educational programmes are being attended. A generally recognized problem is the lack of opportunities for those children working with their parents in the informal sector to raise an additional income. According to Gatchalian, these children are now beyond the reach of any educational system and

cannot benefit from programmes designed for them. Studies on the possibilities of EWP programmes for the informal sector might improve this situation.

Except for the East-Asian countries employers in general do not accept employees who are not fully trained. This raises the question of who is responsible for training. It is a matter of cultural conditions and circumstances, when employers do not accept untrained employees. It depends also on the existing cultural conditions whether education is a function of work or a function of society. Jennings noted:

> "Perhaps what is needed above all is for industry, the business world and private enterprise to accept that the preparation of young people for the working world is as much their responsibility as it is the school's."

Finally, there is also the incorrect assumption that jobs will automatically come with adulthood. There are not enough jobs at all. So they have to create work for themselves, for which they should be given skills and opportunities. In this connection women also need opportunities to earn money in order to create a more solid economic position.

(3) Common experiences on education with production programmes

In the papers presented at the symposium and during the group discussions a variety of national and regional examples of EWP programmes came up, indicating similarities as well as exposing the many differences in philosophy, objectives, policy, cultural environment, political setting, etc.

According to Hoppers's presentation education-with-production in Africa is mostly associated with the incorporation of an element of practical training and of production into the activities of primary and general secondary education. Further attention is also given to the integration of production skills training, especially in non-formal programmes for out-of-school youth. Hoppers also mentioned that the educational scene in Eastern and Southern Africa is offering a wide variety of innovations in work-oriented education and also of shades of opinion as to what they represent. In several countries programmes with different philosophies and aims exist side by side in the same segment of the educational system, even in the same school.

Education-with-production as a concept, while official policy in several countries, is not a dominant mode of thinking and it still takes a modest but rather controversial place among various schools of thought concerned with the relation between education, work and society. There are different interpretations, says Hoppers (1988: 17), of its various dimensions as well as of the value and outcomes of its practice.

In his presentation Tomesen described a case study of a technical skill

training intervention model for small entrepreneurs in the North West Frontier (NWF) province in Pakistan. He observed that due to the poor educational base in Pakistan in general and in this province in particular, most entrepreneurs and workers are semi-literate and have learned their skills through apprenticeship training exclusively. According to Tomesen (1988: 2) this lack of development of human capital has resulted in a low regard for the acquisition and transfer of technology and engineering capabilities.

In the programme described by Tomesen a training needs assessment was considered essential to be undertaken before any training activity could be conducted. On the basis of this training needs assessment and the observations made during demonstrations a selection of enterprises and trainees was made and a tailor-made training programme was prepared. Different from the formal schooling system, the project target group was more in need of remedial training in specific, and most often limited topics rather than in systematic and prolonged teaching along sequential subject matter lines.

During workshop sessions Malekela gave an account of the situation in Tanzania. From a historical perspective it was shown how education, from the precolonial period until today has been linked with productive life. The current education for self-reliance policy emphasizes the need to integrate mental and productive work.

The examples from Latin America and some African countries presented by Cabral de Andrade showed that there are different kinds of interest in EWP programmes. This was clearly illustrated by Jennings's study. She studied the effectiveness of work experience programmes in secondary schools in the Caribbean and the Commonwealth countries. Like Tomesen, she too is aware that the impact of the training, or any other form of newly acquired knowledge or skill, is difficult to measure. However, despite the limited nature of the effectiveness, work experience programmes continue to flourish. The main difficulty experienced in this type of programmes is the absence of adequate financial resources for initial establishment of the unit or work programme.

In Thailand training activities are being implemented in school and in adult education programmes. The concept of self-reliance and people's participation is prevalent in the occupational development programmes. Here a micro-planning approach is used, the villagers identifying their own occupational needs and also planning, operating and evaluating their own development programmes. EWP programmes as such, do not exist in China, but many schools and training institutions have a 'production unit'.

(4) Teacher training

The problem of qualified teachers in EWP programmes is generally recognized. Jennings (1988: 25) mentioned that "work experience programmes are costly, particularly so in developing countries of the

Commonwealth where they tend to be integral parts of vocational education geared to training in employable skills, this requires the provision of trained teachers in the vocational areas and well equipped workshops which are adequately maintained and supplied with equipment, tools and materials." The same problem is identified for Tanzania, by Malekela (1988: 18): "There is a need to train teachers who are to be given the necessary knowledge and skills to run the education for self-reliance projects and be able to teach as well. Relying on untrained teachers might bring about undesirable results as currently experienced." Finding qualified teachers was also one of the problems described by Cabral de Andrade (1988:8) in EWP programmes.

Thailand, however, seems to have overcome this problem of unqualified teachers. There is no training for these specific jobs in EWP programmes, but guest teachers are invited and/or recruited from specialized departments or institutions to carry out some specific assignments. This is more cost effective and efficient. Moreover, training teachers in various specific skills is perceived as an impossible task in Thailand.

Another problem in this field is more at a macro-level. It is the deterioration of the quality of education in general in the developing countries and the decline of the economic situation. Inadequate resources (human and material) and weaknesses in financial control and management of the school system have grown worse in many countries. Teachers engage in other jobs to augment their inadequate incomes, which leaves them less time to prepare for school, or otherwise attend to the development of teaching competencies and skills.

How to tackle this problem? In this connection the role of technology can be mentioned, with experiments in distance learning (open university) and other high technology programmes for teacher training as used in Indonesia and the Caribbean region. Circumstances in other developing countries make these options hardly applicable because of high cost and lack of facilities (Zambia, Tanzania). Other options which could be considered are peer, mobile and institutional training (Thailand) and the distribution of (video) cassettes (Indonesia). Research in this field is needed on the effectiveness of the media in the teaching of certain productive life skills as this may prove more cost-effective for certain developing countries.

In Jamaica, for example (Jennings 1988), one tries to train teachers in the formal schoolsystem, to enable them to integrate general subjects into productive subjects: metalwork, farming, construction, marketing etc. Through this integrated approach - and through facilitating pupils to acquire ample practical experiences during school hours - one hopes to change the pupils attitude towards manual work in such a way that he or she inserts this type of work with his or her perspectives for the future. This type of education with production is already practised in one form

or the other in Jamaica, Zambia, Ethiopia, Tanzania, Pakistan, China and Thailand, to name a few.

Discussing teacher training the general observation among the participants was that the salaries and working conditions are usually very poor, the level of quite a number of teachers is a saddening fact. The best teachers find lucrative jobs in the private sector. Others make more money by work on the side (underground or informal economy). However, due to the economic crisis teachers in general are interested in Education with Production. It gives them an opportunity to rise their income. The SHAPE-programme in Zambia tries to use this motivation in in-service (on the job) training. This programme has shown some ways to tackle the teacher-income problem, built on their motivation to increase earnings.

(5) Financial and institutional implications

In spite of progress made in terms of an increased level of public expenditures devoted to education and a rise in the percentage of national income spent on public education during the past 25 years, the developing countries have not been able to close the knowledge gap between them and developed countries. As Habte indicated, increased financial support, a better use of limited resources and implementing public support by other sources of finance are necessary to improve the situation.

Combining education with production can lead to an increase in the bulk of goods and services available, to raising funds to finance school activities and/or the family budget. However, in general financial problems are prevalent in the implementations of EWP programmes. In Kenya it has become increasingly expensive to finance the self-help training institutions. Although they receive financial assistance from the community, local and international organizations as well as government support in the form of instructors' salaries, they have switched to production to meet capital and recurrent expenditures (Sifuna 1988: 16).

In the Tanzanian case it is estimated that some 25% of the recurrent costs are met by self-reliance activities. However, a negative side-effect is that the activities divert too much attention from the academic components of the curriculum. More research is needed on how EWP (formal and non-formal) can generate local resources to complement government subsidy or to replace it. Apart from a more efficient use of present resources, complementary ones such as enterprises and NGOs might have to be tapped.

As far as institutional implications of EWP programmes are concerned, it would be worth examining the question of control and the decentralization of power. The generation of resources by the school itself could give it more control over the curriculum; how could central governments transfer this control to local schools, thus enabling the adaptation of the curriculum to the local circumstances (work

opportunities)?

(6) Concluding remarks

As Hoppers in his paper clearly stated, much literature on education with production is mere advocacy, neither a proper description nor evaluation of the various programmes and experiments. Therefore, more research is still needed. For this purpose the establishment of networks of researchers could be useful in strengthening research capacity and dissemination of research results.

An exploration of the practice of networking in research on EWP shows the experience and potential of networking in East and Southern Africa. The programme is an effort to encourage research across the socio-economic and political situations in different countries. In Ethiopia EWP programmes are part of the government educational policy (Biazen 1988), while in Kenya EWP programmes are not yet institutionalized. In the latter country especially the Youth Polytechnics and Harambee Institute of Technology have switched to production to meet capital and recurrent expenditures and to socialize the youngsters more effectively for technical and social requirements of the work environment.

Besides networking a need for certain research priorities came up during the discussions of the symposium. They are listed below.

1. In order to make use of the experience with EWP programmes, comparative and collaborative studies across cultures and education systems should be carried out, investigating the interlinkages between the content and the culture of work. Cross-cultural studies are also needed to see in how far
   - students are given the opportunity to link classroom theory with practice (e.g. application of scientific aspects of production learnt in science classes to actual production in the factory e.g. China's school-run factories);
   - students are exposed to a range of production processes (e.g. Zambia, a variety of workshops that enable exposure to varied production processes).

2. Another field of research concerns in how far EWP programmes can change attitudes and values towards work in the various cultures of society. Qualitative research could highlight the effects of school culture or attitudinal change in a comparison of experiences across cultures. This should also take into consideration the contradictions of school culture vis-a-vis the culture of society (e.g. honesty is promoted in school culture but often not useful in real life).

3. Research is especially needed into how skills could be incorporated into teacher training programmes, and more generally, into the nature

of the training for those that have responsibility for EWP programmes in the formal education system, as well as in non-formal en informal educational and training activities.

4. If the ultimate objective is to improve the quality of life of a society or a nation, the research should pay due attention to the life problems and needs prior to an identification of the learning needs. Information is needed on what men, women and children do in the daily routine of their lives.

6.
Research issues: from shopping list to policy guidelines

During the symposium, suggestions concerning research came from fellow research workers, representatives of fellow research institutes, from policy makers of both government and UN organizations, as well as donor organizations and from people in the field.

At CESO's request participants from the South formulated a number of research ideas. A dozen of these papers were handed in and distributed among fellow participants. The papers related to countries such as China, the Philippines, Pakistan, Nepal, Hong Kong, Thailand, Mozambique, Tanzania, Costa Rica, Surinam, Ethiopia and India.

Some of the participants reported in brief on the learning needs of specific user groups they had been working with, and called for research to develop special educational programmes. Examples are vocational training courses for women (Kan and Kane) and girls (Devkota), and for young war victims in Mozambique (Visser and Pereira). With a view to the precarious situations in war-struck Mozambique, the authors stress the importance of research to improve our knowledge of the psychological, cultural, and social implications of the way children are affected by war. The effectiveness of the rehabilitation strategy so far adopted will have to be evaluated, and curricular reform will have to result from the process referred to.

These papers obviously reflect the personal, scientific and/or institutional (pre)occupations of the authors. In most cases they present a list of questions thought to be relevant to the country concerned. However, they are mostly not specific enough for the situation in the author's own country, with the exception of the paper from Mozambique, which partly stresses the present war situation.

Only a few papers have a more theoretical character, and are aimed at the gaining of knowledge. Subjects under discussion are mainly taken straight from practice, questions asking for solutions of concrete problems. This is especially the case in the papers on Thailand, Nepal, Mozambique and Hong Kong. In other words, they are not research proposals, but questions it is assumed research will be able to find an answer to.

(1) Research guidelines and problems

According to the Position Paper activities within the central field of Education and Culture usually refer to learning situations within, or are adapted to, an existing socio-cultural unity. This education may be scholastic, cursory, or in-class, but this is not necessary. Studies in this field can on the one hand concentrate on innovations, and on the other hand on the revaluation of existing forms of education. What is stressed -both in the case of innovation and conservation- is that the teaching approach focuses on the creative learning of problem solving, which brings about change. Learning to solve problems independently means to the educatees learning to lend significance to their lives in their own way. Unlike the intellectualist approach of scholastic education, this also means taking into account the social and cultural context in which the learning processes take place.

It seems that for the moment, the studies on Education and Productive Life tend to neglect two aspects. One is the socio-economic skills necessary to take part in a society subject to rapid changes in an administrative, organizational and social sense. In this context the studies and experiments of the Delsilife project of SEAMEO/INNOTECH are of interest. The other aspect is education for people involved in other than small-scale, or even large-scale enterprises in 'modern' production processes. And this aims at managers as well as at people on the work-floor.

With these general starting-points in the back of their minds, the participants composed a list, during the symposium, of some general guidelines and problems. The idea was to use these guidelines in the discussions (in smaller seminars) on Education, Culture and Productive Life. The guidelines and problems were formulated by the participants as follows:

1. Research should focus primarily on the local level -the school and the community- as against more global issues.

2. Research should be based on the needs, interests and preferences of the people.

3. The use of anthropological, ethnographic studies, without prejudice to multi-disciplinary studies, is to be encouraged.

4. Research should preferably be of an applied nature, but at the same time take into account fundamental implications/objectives of the study.

5. Research should fill gaps -where no research data are available- and therefore be selective. It should also bridge gaps between completed

research and lack of implementation.

6. Conflicting demands of researcher, research population and user groups should be resolved.

7. National demands should be adapted to local conditions. Effective and proper communication should be established between the national level and the smallest elements in the structure.

8. Research should not be done for its own sake but should contribute to sustaining development. This is a special concern of funding agencies.

9. The concept of linkage between education (schools) and the workplace is not a simple one. There is no single linear relationship between education and employment.

It was agreed upon that there is still little experience in participatory research as an instrument that can be particularly useful in exploring the cultural context of learning needs and processes, as for example in CESO's experiences in the project in the Amazone region in Colombia. In this respect researchers could be asked to pay more attention to the reciprocal influences of the various forms of education. This may reveal which particular skills, values, attitudes or behaviour can best be dealt with by a specific programme.

(2) Papers presented on research: summarizing the highlights

Within the broad range of papers (37 in all) prepared for the symposium, some specifically dealt with research issues and will be referred to in short. King, in his paper, provided an outsider's view of Dutch donor-aided research into education in developing countries. He noticed the following dilemma for CESO's current research policy:

> "The focus of CESO's professional interests has clearly been at the local level, in the village primary schools and its teachers, the problems of young people, its transition to work, entertainment and literacy. In a word, basic education both formal and informal, but almost no publications that relate to secondary and higher education. CESO exposes strong emphasis on elements of basic and adult education."

However, King notices the following discrepancy:

> "The sector paper on education, training and research is exclusively oriented towards college, secondary and university education. By contrast the thrust of much of CESO's research interest has been with

basic education, with patterns of learning and in the workplace."

According to a paper presented by Lenglet, CESO research should concentrate itself on issues which have a relevance or importance from the perspective of official Dutch development aid and policies or priorities of NUFFIC. He provided a list of 31 research topics, including policy studies (such as sector assessment, evaluation and assessment methodology), input, process, output, internal and external efficiency studies. Lenglet proposes two options for CESO's future policy outline. One in which CESO stimulates, co-ordinates and manages a national and international education research network, the other in which CESO develops into a specialized research institute dealing with the cultural and anthropological approach to education and development issues:

1. CESO as the centre of a national and international educational research network, stimulating, co-ordinating and managing research, which will be primarily carried out by Dutch and foreign researchers. Apart from this management task, CESO's main contribution would be in such areas as: policy studies, sector assessment methodologies, evaluation research, and maintaining a well documentated database on education and development and on research in this field.

2. CESO as a specialized research institute in issues dealing with the cultural and anthropological approach to education and development issues. Its scope would be wider and more up-to-date than its present one. It would not play a general programming or networking role, but this should be restricted to those areas where it has (developed) its own expertise.

In both options (and others) CESO is obliged to determine its position regarding NUFFIC, other educational research institutions and researchers in the Netherlands, other international research bodies (e.g. World Bank, IIEP, London University/DICE, University of Stockholm/IIE, etc.) and researchers and research institutions and networks in developing countries.

Given the emphasis of UNESCO/UNICEF on 'basic education', and within the forthcoming World Bank policy paper on 'quality of education', these patterns are also reflected within the research priorities outlined in the CESO symposium. CESO seems to be well in line with the present patterns. A clear exception, however, should be made for the stressed relevance of research into secondary education for learning processes.

Droogleever Fortuijn presented a thorough review of some evaluation practices in the field of work-related educational programmes. The paper could contribute a basis for a research proposal related to a comparison

between effectiveness of education-with-production programmes and conventional programmes. Components of his painstaking classification of evaluation research strategies and types of evaluation could be utilized for this purpose.

Ooijens and Van Kampen presented an inventory of the main areas on adult literacy in the Third World. This is the more relevant as UNESCO declared 1990 as the International Literacy Year, focusing much attention within international fora on literacy as a fundamental prerequisite for development. Reference is made to the co-ordinating role played by the International Council of Adult Education (ICAE) in retrieving research data available and identifying research requirements in the field of adult education.

Three main categories of research on literacy are distinguished: 1. forms of participatory research within a programme involving a literacy project; 2. evaluation research (interesting if of a comparative nature); and 3. experimental research, aiming at the improvement of the quality of adult education in the long run.

Biervliet outlined the design of a collaborative educational research programme involving institutions in the South with the Netherlands, which requires the matching of research needs perceived in the South with the research potential in a specific country or region and the Netherlands and with donor agencies' willingness to fund the research.

An interactive approach will be opted for in identifying problems, assigning priority to specific topics, drafting the research design, outlining the organizational structure and potential sources of funding. Different types of collaborative research were envisaged by Biervliet:

- Full-fledged collaboration between researchers from the South and the Netherlands. The framework for such a collaboration may be specifically designed for the research project, may originate from an existing link between a university in the South and the Netherlands or may constitute an educational research component related to a Dutch-aided development project.

- Comparative research in more than one country in the South involving research teams from the Southern countries and from the Netherlands.

- Comparative research on issues of relevance to both countries in the South and the Netherlands, arrangements being made for process monitoring and feedback mechanisms.

- Support by a Dutch institution to theme-oriented South-South research co-operation in the framework of a research network.

With respect to eligibility of research, emphasis will be put on content research of a descriptive and analytical nature and action research, excluding research focusing on an analysis of secondary data such as is the case in state-of-the-art reviews.

On the question whether we should concentrate on applied or fundamental research, Biervliet replied (during a discussion) that the type of research depends on the needs and types of collaboration involved. He further stated that fundamental research is characterized by a long-term perspective exceeding the life span of projects, the latter aiming more at institution building, manpower/human resource development and/or the strengthening of research infrastructure.

In the discussion following Biervliet's presentation Tunsiri and Socrates pointed out that the Delsilife project forms an excellent example of a collaborative research activity, involving a research institute in the South (INNOTECH) and one in the North (CESO). Tunsiri called attention to the Delsilife participatory research model. This research is group-oriented, co-operative and socio-economic rather than political in its outlook. In Thailand it is linked to a harmonious model of development.

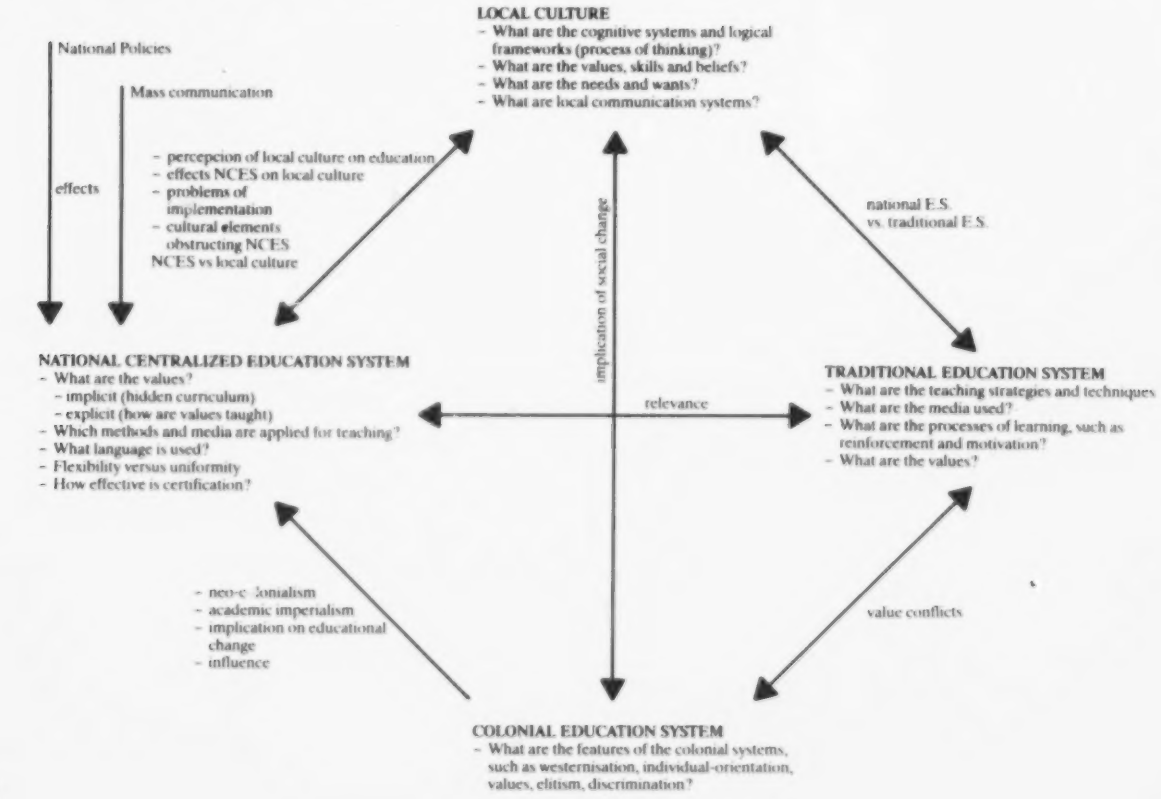
Socrates, formally working at INNOTECH and involved in Delsilife, sees the project approach of Delsilife as an example of a North-South co-operation with the aim to support a South-South co-operation. In fact this was the aim of the CESO/INNOTECH co-operative between CESO and the participants in the South-East Asian region providing a South-South link. The representatives of both research organizations were asked to elaborate on the research aspects of project Delsilife, and the role of CESO in the research planning of the project.

Barsaga, an INNOTECH staff member, explained the needs assessment study carried out during the first phase of the project to develop the intervention system. Boeren, the CESO counterpart, explained the areas of research which CESO addressed during the implementation and dissemination phase of the project, at the request of the participating countries. They were: model development, design of effective dissemination strategies and the design and co-ordination of a qualitative assessment of the impact of Delsilife at the village level.

(3) Report on the education and culture group

From the listing of the specific research questions which the four-day group discussion produced, a framework was evolved which established the major research concerns, their relationships and interrelationships. (See fig. 3). This framework guided the formulation of broader research areas embracing several related research questions. The research areas generated by the group are as follows: 1. developing an experimental curriculum model; 2. a review of researches on the effectiveness of various types of media; 3. comparative cross-national study of traditional,

Figure 3: Educational systems within local cultural context


LOCAL CULTURE
- What are the cognitive systems and logical frameworks (process of thinking)?
- What are the values, skills and beliefs?
- What are the needs and wants?
- What are local communication systems?
National Policies
Mass communication
effects
- percepcion of local culture on education
- effects NCES on local culture
- problems of implementation
- cultural elements obstructing NCES
NCES vs local culture
implication of social change
national E.S. vs. traditional E.S.
NATIONAL CENTRALIZED EDUCATION SYSTEM
- What are the values?
- implicit (hidden curriculum)
- explicit (how are values taught)
- Which methods and media are applied for teaching?
- What language is used?
- Flexibility versus uniformity
- How effective is certification?
relevance
TRADITIONAL EDUCATION SYSTEM
- What are the teaching strategies and techniques
- What are the media used?
- What are the processes of learning, such as reinforcement and motivation?
- What are the values?
- neo-c olonialism
- academic imperialism
- implication on educational change
- influence
value conflicts
COLONIAL EDUCATION SYSTEM
- What are the features of the colonial systems, such as westernisation, individual-orientation, values, elitism, discrimination?

colonial and other models of education; 4. leisure studies; 5. learning content, process and context studies; 6. comparative basic research on values; 7. qualitative studies on the ecological factors in the communities.

In developing an experimental curriculum model that strikes a balance between national and local needs, respecting local culture, two phases are distinguished in the operationalization. During phase one the decision-making structures and processes in curriculum development are examined; the similarities and differences in perspectives as regards national and local education curricula are determined; the specific national educational policies (e.g. compulsory education) are analysed in relation to their relevance to the local culture, in relation to the effect on the quality of education, particularly those in rural schools, and finally in relation to the effects on educational access and equity. The last steps have been made; phase two focuses on the design and try-out of this experimental curriculum model.

The second item of the education and culture group dealt with working on an integrating review of studies and researches on the effectiveness of various types of media in teaching and learning in developing countries. By various types of media they meant, for example, the traditional and modern media, the oral and the electronic, the audio and the visual media, etc. This review should pay special attention to the effective utilization of media for different components of education in various cultural contexts, to the quality of the medium of instruction and to teaching effectiveness, to the way these media 'liberate' the rural people and finally to the effects of mass media on formal education and national development.

The third research item put forward dealt with comparative cross-national studies of traditional, colonial and alternative (e.g. Ghandian) models of education. The studies should cover the educational 'philosophy' and objectives of such models; the similarities and differences in their characteristics; the relevance of some of these characteristics to the present educational systems in developing countries; the analysis of why certain features persist in the present-day educational systems; the attitudes of different sectors in society towards national education systems; the values transmitted by different models of education and the value conflicts (if any); the elements of traditional, colonial and alternative models of education that might obstruct or accelerate acceptance and implementation of 'modern' education; and finally the effect of academic or educational 'colonialism' on the quality of present-day education.

The fourth research item ensuing from the Education and Culture group was to do with 'leisure studies'. These studies would have to include a review of programmes, projects and research on leisure both in developed and developing countries. Furthermore attention should be payed to a survey of perceptions of 'leisure' by different sectors, local

patterns of leisure, roles of education both formal and non-formal in relation to leisure time activities. Finally studies on time utilization in the daily life activities of the rural poor should be stimulated.

The fifth research item dealt with 'learning content, process and context'. Studies in this field would include interdisciplinary basic research on cognitive structures and/or thinking processes in various cultural settings, indigenous as well as endogenous settings. Next to this basic research, case studies should be stimulated on indigenous leadership and management systems, both school and non-school based. Micro ethnographic studies on indigenous knowledge, learning processes and media within and without the local educational system should form part of this item on 'learning content, process and context'.

The sixth research item on 'education and culture' was to do with comparative basic research into 'values'. As has been formulated extensively in chapter 4, this research includes the way values are formed, nurtured, sustained, reformulated and lost in different cultures; the analysis of the conceptual framework of values in developed and developing countries; the effective strategies in value development in schools; the relationship between values transmitted through education and social change.

The final research item presented by this group was on the qualitative study of non-formal education (NFE) programmes for rural and urban target groups, especially on those factors that facilitate or inhibit introduction, acceptance and execution of these programmes.

(4) Report on the education and productive life group

From the listing of the specific research question which the four day group discussion produced, the following research areas can be generated: 1. research on the labour market outcomes of work related programmes; 2. research on the link between training in schools and job opportunities in society; 3. the study of links between the socio-economic backgrounds of pupils and types of education chosen; 4. comparative studies on the relationship between education-with-production programmes and the cultural concept of education in selected countries; 5. studies on the various forms of education with production; 6. research on teacher training; 7. research on the role of women in relation to education-with-production programmes.

In this report we cannot go into detail on every research item brought up by the group on education and productive life. However, some of the items may be singled out. Some of them speak for themselves. Research on the labour market outcomes of work-related programmes will focus on the outcomes, using quantitative approaches to assess the impact of the programmes. The central question here is: how do work-related programmes benefit pupils after leaving school? There is a need to examine the link between training in schools with the job opportunities in

society, as this may have implications for the content of the curriculum and the methods to be used. Studies on the relationship between the socio-economic backgrounds of pupils and the types of education chosen bring us the burning question: who should be the beneficiaries of education-with-production programmes?

Comparative studies on the relationship between EWP programmes and the cultural concept of education should be executed in selected countries in Africa, the Caribbean, Latin America and Asia. A strong need was felt for comparative studies across cultures and education systems, the interlinkages between the content of education and the work culture. If the ultimate objective is to improve the quality of life, research should start by examining the life problems and needs, prior to identifying their learning needs.

In this context we might examine in how far EWP programmes (formal, non-formal and informal) can change attitudes and/or values which are deeply rooted in the culture of societies all over the world. We should then need qualitative research on the effect of school culture on attitudinal changes and a comparison of experiences across cultures. Related to this qualitative research we need to take into consideration the contradictions between school culture and the broader cultural context of society.

Studies on the various forms of EWP go into the context and the target groups. The context of the informal sector is not an area of free entry, as there is a tendency for employers to prefer to take on a relative, or a child of a friend as apprentice. Information on some target groups is still lacking. For example, studies on street workers, especially single-parent women and their children, might inform us on their access to EWP programmes.

In addition to the research items on the role of women which are incorporated in the preceding chapters, some more topics were suggested by the participants of the discussion group on EWP. A survey of existing studies on women and EWP programmes would be welcome. The same goes for studies making cross cultural comparisons of the accessibility of different types of education for girls. To what extent does schooling meet the needs of the working lives of women? Still more studies are needed on gender stereotyping in subject choices and subsequent career choices reflected in school curricula and at universities.

(5) Concluding remarks

In many developing countries research into educational issues is limited and hampered by various factors. Such factors may be:

-shortage of researchers;
-lack of training and experience in research;
-too little fundamental/theoretical research;
-lack of research funds;

- lack of understanding, co-operation or approval by authorities;
- insufficient understanding and co-operation by the population;
- inadequate means to publish research papers and exchange or disseminate research results;
- shortage of documentation;
- inadequately developed methodology.

Therefore, strengthening research capabilities needs support. Examples of regional centres (e.g. INNOTECH) which conduct both training and research show an efficient way of equitably extending the benefits derived from the nationals of the countries served by the centre. In particular, the conduct of regional research, using country-based staff gives actual training to researchers and thus strengthens research capabilities of individuals and of institutions participating in such research. In a sense, too, regional centres illustrate a network of institutions that are relatively free from the bureaucracy of ministries of education, but possessing the freedom of action of individual researchers, and yet having the advantage of institutional strength.

It is evident, however, that in such centres even the planning process (for research) is hampered by a lack of adequate financial support. The idea of endowment fund, which challenges the integrity of the principal, allowing only for the expenditure of the earnings of the fund, is not favoured by international financial institutions involved in spending or lending money. It is, in fact, where an endowment fund for research is a pool from different donors, that the issue of the relation between priorities held by researchers (the centre) and those felt by donor agencies and authorities is effectively addressed, as it becomes the obligation of the recipient centre to deal with it.

On the problem of the dissemination of research results it was suggested that information sharing -documentation, publication and exchange- can be accomplished by networking at the national, regional and international levels. Assuming that in the Third World national dissemination networks are not even existent, it stand to reason that initial support be given to the development of national networks; at the same time that existing regional and international networks be strengthened. In this regard, experience shows that actual documentation and publication of the nature of the useable outputs of a research is an activity that needs external support.

This is quite crucial on a national level since it may be assumed that use or adaption of a research output will be initially pertinent to the country. However, if the dissemination phase of a project is not given adequate support, the research will end without reaching intended beneficiaries. DELSILIFE is a case in point. Without support from CESO, the dissemination package (which includes video material) could not have been produced.

On the need to pay greater attention to research relating to support for primary and secondary education, as Habte mentioned, there are perhaps more studies than one would care to count. The problem here is locating them, filing and disseminating the information for adoption or adaptation. Over and above simple documentation and distribution of the information -through various media- what is crucial is for the prospective implementor to observe, on site, the prototype or the model implementation. The observation, of course, must be complemented with discussions and analysis of implications to policy and practice in a new venue or condition.

What may be given financial support is the attempts to observe, discuss and analyse implications to policy and practice in these matters. Unless this is done, any interest shown will never bear fruit. This may also be one effective way of establishing contact and collaboration among researchers. It is also more economic than funding agencies continually supporting researchers to start from scratch.

7.
Research issues and policies in the field of educational development co-operation

In the Dutch context it is often felt as a reason for concern that there is considerable pressure on Dutch research into education in developing countries. This is because, 1. Dutch specialists are few and scattered across the different universities; 2. there was no professorial chair for the subject; 3. the restructuring of science policies dictates that individual research projects are to be combined in provisionally financed research programmes, termed VF-programmes; 4. there is no VF programme which basically deals with educational questions in developing countries; and 5. because education has no priority in the Research and Technology programme. In spite of all this there is, especially in development co-operation, a growing attention for the undertaking of (policy-aimed) research in this field. This was made evident by the publication of the ministerial note on the Sector Programme for Training, Education and Research (by DGIS) and by RAWOO's (Advisory Council for Scientific Research in Development Problems) Advisory Letter on Research in the field of Education and Development.

(1) Dutch Development Aid

Official Dutch development aid is concentrated in about 50 developing countries, which are categorized as 'programme countries', 'programme regions' and 'sector countries'. Programme countries are countries in which the Netherlands government has planned bilateral assistance programmes on many different subjects. They are: Bangladesh, Egypt, India, Indonesia, Kenya, Yemen Arab Republic, Pakistan, Sudan, Sri Lanka and Tanzania. The 1988 budget for these countries was Dfl. 952 million.

Countries in programme regions receive assistance only for subjects of regional significance. The regions are: Southern African Region (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe, with a total 1988 budget of Dfl. 103 million); Sahel Region (Burkina Faso, Gambia, Guinea Bissau, Cape Verde, Mali, Mauritania, Niger, Senegal and Tchad with a total budget of Dfl. 99 million); Central American Region (Costa Rica, El Salvador, Guatamala, Honduras and Nicaragua with a total 1988 budget of Dfl. 40 million); Andes Region (Bolivia, Columbia, Ecuador and Peru with a total budget

of Dfl. 35 million).

Sector countries receive assistance through one or more of the three sectoral programmes: Rural Development (1988 budget Dfl. 36 million), Industrial Development (1988 budget Dfl. 338 million) and Training, Education and Research (1988 budget Dfl. 157 million). These sectoral programmes are of course also available for the programme countries and regions. The sector countries are: Benin, Burma, Burundi, Cameroon, China, Ivory Coast, Ghana, Madagascar, Nepal, Nigeria, Philippines (starting 1988), Rwanda, Thailand and Tunisia.

The sector programme for Training, Education and Research (TER) was established in 1986 and now forms the programmatic framework for a number of long existing sub-programmes or instruments. This programme has the same status as the Sector Programmes for Rural and Industrial Development. It fulfills two functions in the bilateral policy: firstly, a supportive, instrumental function with respect to the two principal components; and secondly, an independent sectoral function. The supportive, instrumental function is manifested in the harmonization of the two principal components, viz. rural development and industrial development, taking into account the often indirect, condition- creating nature of many training, education and research activities. The independent sectoral function may sometimes mean that in addition to the selected industrial sectors and rural regions, a country policy document will also include a sector (for example, human settlements) for which the Education and Research Sector Programme is employed. This is especially the case where efforts are made to generate new knowledge and skills, to use facilities offered only by the Netherlands, or to develop new fields of interest within the framework of bilateral development co-operation.

In the context of development co-operation, the Training, Education and Research Sector Programme is designed to contribute to the elimination of poverty and to the fostering of self-reliance in developing countries. The main objective of the Sector Programme is to increase the capacity and improve the quality of human resources in developing countries and to generate innovative knowledge and technology in, and on behalf of, those countries.

This sector programme is aimed above all at promoting co-operation between organizations active in education and research (independent international education and research institutes, industry etc.) in the Netherlands and in developing countries, and co-operation with international organizations in a way which best serves the needs of developing countries. This of course takes no account of the possibility that education and research activities in the Netherlands may be funded through other budget categories.

The Training, Education and Research programme has three objectives derived from the main objectives:

1. Institution building in developing countries: this entails broad-based, long-term support for education and research institutes and professional organizations in developing countries with the aim of helping those countries to build up an institutional capacity of their own, whether education, training and research establishments or professional organizations.

2. Manpower development via education and training, both in the Netherlands and in developing countries: this concerns the education, 'upgrading' and retraining of students and persons already in employment with the aim of making up the quantitative shortage of professional cadre in the short term.

3. The generation of innovative knowledge and technology through research and development: as far as research and development are concerned, the emphasis in the sector programme will lie on strategic policy research and technology development in the medium and long term.

The following are the principle characteristics of the new sector programme:

1. Investigating precisely what useful contributions the Netherlands can make towards meeting the requirements which have been identified for developing countries in terms of specific forms of training, education and research.

2. Implementation of the sector programme is, as a rule, contracted out, and the role of the government, apart from the general co-ordination and stimulation, is restricted to assessing the relevance of the programme to development, and decisions on commitments and evaluation.

3. The activities of the sector programme in the programme countries and regions are consistent with the programme countries and regions policy. Training, Education, and Research (TER) have a supportive function in rural and industrial development, while at the same time retaining their own sectoral role, as described in the countries and regions policy (both in and beyond the target regions and sectors).

4. Special attention will be devoted to the position of women and aspects of ecology and energy. Evaluation of education and research activities will take account of their consequences for the position of women, the environment and the production and consumption of energy.

Strengthening the institutional infrastructure (planning bureau departments, universities, training institutes, research establishments, women's organizations, nutrition information services and agricultural extension services) in these three fields through training and research could help to improve the disadvantaged position of women, repair the damage done to the natural environment, and alleviate the acute energy problem.

(2) Research Policy Development in the Netherlands

In the course of 1986-1987, the government started a process of study and consultation within its own structure (Ministry of Foreign Affairs/Directorate General of International Co-operation, Ministry of Education, Ministry of Agriculture and Fisheries) and in the 'field', to identify the needs and demands for TER/Human Resources Development in developing countries, to assess Dutch capacity and interest to cater for this demand, and to determine policy priorities. The major actors in this 'field' are the universities and research institutes, and in a lesser degree polytechnics and post-secondary professional colleges as well as industry.

The Netherlands Organisation for International Co-operation in Higher Education (NUFFIC) co-ordinated the consultation process, paying particular attention to the education and training component of the TER sector. In this NUFFIC was assisted by CESO. RAWOO contributed to this process, by elaborating the needs of and instruments for strengthening the research capacity in developing countries and conducting strategic research.

The first round of consultation unfortunately ended rather inconclusively. Much more study and analytical work will need to be undertaken in order to formulate a comprehensive human resource policy which may contribute to the development and reinforcement of the entire education and research sectors in developing countries, and avoid considering education, training and research as mere supporting instruments for other development policies and goals.

The sector programme is divided into four sub-programmes: 1. co-operative linkages; 2. training in the Netherlands; 3. direct assistance to institutions in developing countries; and 4. research and technology.

The sub-programme 'co-operative linkages' is based on the thought that through longer term partnership arrangements with one or more Dutch institutions (mostly in the higher education and research zone and similar institutions overseas) the overseas partner will be strengthened. Within each linkage agreement a large number of different projects, in different disciplines, can be undertaken. Activities include short and long-term teaching and research assistance, curriculum development, staff development, library and workshop support, management assistance, joint research projects.

The sub-programme 'training in the Netherlands' is mainly concerned

with the recruitment and placement of qualified (post-MA/MSc) Third World nationals for relatively short (2 months - 2 years) highly specialized postgraduate courses (about 150) in the Netherlands. There are about 20 institutes which specialize in these courses. In addition, polytechnics, industrial firms and other post-secondary institutions, and, increasingly, universities, offer such courses, which are mostly given in English, sometimes in French or Spanish.

The funds made available by the third sub-programme 'direct assistance to institutions in developing countries' are directly forwarded overseas without the mediation of a Dutch organization. At present, most of the available funds are needed for supportive fellowship programmes at participating institutes. There is strong pressure to transform this sub-programme into an instrument for facilitating South-South co-operation, and for strengthening research environments.

The main focus of the sub-programme 'research and technology' is, at present, the functioning of strategic research, conducted either at international research centres (e.g. CGIAR) or Dutch institutes. The programme should be adjusted and extended to encompass also the other main objective of the sector programme: strengthening research capacity.

(3) Research on Education and Development

One of the spin-offs of the sector programme is a renewed interest in and need for research into the relationship between education and development. This is rather scattered among persons and institutions, and often not embedded into a longer-term programme of research. The major exception to this rule is CESO, which is described in detail below. NUFFIC does not undertake such work, although it has a major advisory function in the area of education and development based on its intensive involvement in developing highly specialized post-graduate courses for Third World nationals and in creating linkages or partnerships between Dutch higher education institutes and their partners overseas.

Arguing that Human Resources Development policy should be informed policy, RAWOO recently produced an advisory letter (to the Minister of Development Co-operation) on the issue of research on education and development. This advice in some aspects follows an earlier recommendation (1986) of the National Advisory Board on Development Co-operation (NAR) concerning the Dutch capacity to provide training and education for developing countries. In its letter, RAWOO describes the relatively restricted ways in which Dutch researchers pay attention to issues of education and development. RAWOO recommends that longer-term problem-oriented education research should be stimulated. It identifies three major research themes: 1. education for all; 2. education, labour market and employment; and 3. education and culture. RAWOO emphasizes the significance of strengthening the capacity and infrastructures for education research in developing countries. It proposes

to concentrate the Dutch effort in this respect on three programme countries or regions, chosen from among Indonesia, Pakistan, Southern Africa and Central America.

RAWOO urges the combination of Dutch expertise and capacity in this area in a country-wide research programme. And it suggests that such a programme could be co-ordinated or supported by both CESO and WGOO. RAWOO's advisory letter initiated a research proposal to design such a comprehensive collaborative research programme, prepared by CESO and endorsed by key researchers from Dutch universities involved with education research for development. This research proposal was submitted to the Directorate General for Science Policy of the Dutch Ministry of Education and Science and obtained formal approval in November 1988.

(4) The Programme Study

CESO, closely co-operating with WGOO, seized the financial opportunities offered by the Directorate General for Science Policy of the Education and Science Ministry, by commissioning a programme study. The object of a programme study is to test the feasibility of developing, staffing and financing a research programme in a particular field which has received little attention because it is novel, and/or because an institutional base is lacking. In such cases the Ministry can provide the risk capital to break the vicious circle contained in the fact that a broader research programme inevitably requires more time investment of researchers, which they either cannot or will not grant as long as the programme cannot be reasonably expected to come into being. The outcome of a programme study should exist in a number of research protocols (research plans including possible ways of financing) whose coherence should be manifest.

The programme study is designed so as to ensure an interactive development of correlated research protocols in close correspondence with participants from the Netherlands and from the countries of the research sites. CESO's memorial symposium played an essential role in this interaction process, aiming to bring to light the research priorities in developing countries.

The study is to concentrate on the themes 'education and production' and 'education and culture'. The programme study's first phase of five months was launched starting December 1, 1988 and consisted in the CESO symposium as a platform of exchange with researchers and users of educational research results from developing countries, with RRAG representatives and representatives of donor organizations. Six participants were specifically invited to the CESO symposium because of their resourcefulness related to themes and regions covered by the programme study. As a consequence, the design for such a programme study was intended to be catalytic in striving to achieve a coherent and united Dutch

effort.

The entire set-up of the programme study presupposes the development of the Dutch potential, and is based on the needs defined by researchers and users of research outcomes in developing countries. It will be attempted to avoid any overlap with existing research initiatives in the field of education and development, by acquiring information as to current and proposed studies financed by international donor organizations, prompted by national and regional organizations, involved in educational research and recorded in information networks and databases. In addition, the study opts for a regional limitation, concentrating on those regions selected for Dutch development efforts.

Furthermore, the study opts for an interactive approach, involving the active participation of networks of educational researchers in developing countries (e.g. RRAG) as well as in the Netherlands (in particular WGOO), donor organizations, research institutes and policy-making institutions. Within this interactive approach regional RRAGs, educational research associations, research institutes, users of education research results in developing countries, donor agencies and education researchers in the Netherlands will play key roles.

Interest groups in the South are being approached to identify problems and specific research topics from the priorities originating from the CESO symposium. Donors have been approached to assess the identified research topics related to their priorities for financing educational research. An inventory of expertise available in Dutch universities and research institutes will yield profiles of potential partners within the collaborative Dutch research body.

Apart from an emphasis on comparative research, CESO in consultation with NORRAG may play a brokerage role towards potential funding agencies, if interesting proposals in other regions or countries should occur. However, officially the programme to be designed should be restricted to institutions in ASEAN countries (Indonesia), SAARC countries (Pakistan), SADCC countries and Central America.

It is essential for the proposals to be designed in consultation with the researchers in the developing countries. This can be achieved by means of the panel function attributed to the CESO-symposium and by selective visits to be paid to institutions involved with educational research and to user groups in South-East Asia, Southern Asia, Southern Africa and Central America. In addition, international panels such as the IWGE and IIEP seminars, the INNOTECH conference, the NUFFIC conference on the World Bank policy paper dealing with technical education, as well as assemblies of the RRAG groups may offer possibilities for testing the progress of the study to attending researchers and users from developing countries.

(5) Networking with the emphasis on South-South linkages

Ghani, co-ordinator of the South-East Asian Research Review and Advisory Group (SEARRAG) noted the tendency for research in the region to be defined and designed in a very narrow positivistic term. Generally, very little impact is noted of research on educational policy-making and practice.

Educational research priorities in the Third World are still being imposed by outsiders. For long years donor agencies tended to direct their aid to those research priorities which might benefit the developed countries. In 1976 RRAG came into being, encouraged by an informal group of donors, the Bellagio Education Group, and chiefly by the financial support of the Canadian International Development and Research Centre (IDRC). Thus a mechanism was devised to enable developing countries to proclaim their own research priorities, to enhance the relationship between education research and policy making, to enable clearly directed fund-raising and to give international attention to current research.

RRAG's main activity, at least in the initial years of its existence, lay in reviewing the state of education research (state-of-the-art reviews). To make a more effective use of the networking principle, in the early eighties a group of researchers from the South proposed the establishment of regional RRAGs. The initial settlements for this purpose were made during a meeting in Jamaica, 1982.

In the course of the succeeding years these regional RRAGs came into existence, partly by means of IDRC funds. It had now become easier to pool and disseminate research findings in the countries within a particular region, to achieve a more practical co-operation among networks of researchers and policy makers, and to encourage the setting up of research associations.

Consequently, each region had its own educational research agenda. The state-of-the-art reviews received due attention. SEARRAG initiated national studies on the 'educational research environment'. A study was published on 'Educational Research Environments in South-East Asia', edited by S. Gopinathan and H. Dean Nielsen. It contains research environment studies on Indonesia, Malaysia, Philippines, Thailand and Singapore describing the state of educational research in these countries and identifying the salient features of the country's environment which could influence the way in which educational research is conducted.

In addition to state-of-the-art reviews, Ghani (1988:7) advocates 'state-of-the-practice' reviews, showing who is actually doing what.

The objectives of SEARRAG are:

1. to assess the stages of development and appropriateness of educational research in the South-East Asian region;

2. to be a forum for policy makers and researchers to pool and exchange information on research needs and priorities;

3. to be a catalyst in initiating work on common themes, whether within the country or within the region, and to strengthen the role and impact of research in decision making by involving policy makers, researchers and practitioners in SEARRAG-like activities;

4. to assist in the identification of suitable research expertise/researchers in the region.

SEARRAG owns publications and an abstracting and bibliographic service on educational research which is vital to a further investigation of research priorities as identified within the CESO symposium and for the identification of suitable partner institutes in the region.

Networking has been provided with a new boost through the establishment of national networks of educational researchers in SADCC countries and in, for example, Indonesia, where IDRC also established an Indonesian Action Research Network (JARI). One of the dilemmas in networking is the individual versus institutional character of the network. In the EPTA network in Southern and Eastern Africa, Hoppers perceives a dual role of the participants: "As representatives of their institute or organisation, with its specific viewpoint, its official policies and practices; and as individuals with their own perceptions, experiences and interpretations on the other hand." Participants in the symposium were faced with a similar dilemma in identifying research priorities and in providing their opinion on the possibility and feasibility of collaborative research.

Based on his experience with the EPTA and RRAG network Hoppers comments on the role played by networks of educational researchers in developing countries in enhancing a learning process among their participants:

> "Of equal importance for EPTA has been its developing a learning process among the participants on crucial issues of education and development. Some of the learning took place in national seminars, which in Zambia provided a first occasion for researchers, administrators and practitioners in different ministries to discuss openly their experiences with education, training and production."

Because most individual researchers have an institutional linkage providing different degrees of support to the network, EPTA will continue to operate as a network of individuals, active in research and practice related to Education with Production.

In reaction to the identified research requirement related to research inside the classroom, into learning processes and related to secondary

education as well as primary education, the need was stressed to arrive at a proper dissemination of research outcomes already available. Within the framework of the RRAGs, both in Latin America (REDUC) and in South-East Asia (SEARRAG), attention was given to approaches to disseminating research outcomes and to strengthening the link between researchers and policy makers.

(6) Concluding remarks

A problem with institutional co-operation is that contacts are often on the individual level, informal, yet effective at that level. To institutionalize co-operation would be to risk much time and money being spent on organization and administration. The same holds good for 'projects': acquisition, administration etc. are a burden for under-staffed and under-equipped institutes.

Maybe the networking that is in vogue these days will give an answer to these problems. The extent of such networks requires the individual scholars to be institution- based, that is, the person must function as a go-between for information between his institute and the network. The advantage is its informal character, a problem is the insufficient organizational base for funding by sponsors. In this respect it is advisable that sponsors be involved in or closely related to the networks. Such is the case with SIDA and IDRC, not with DGIS.

Networking is functional in the first place in documentation and information exchange. But where scholars have common interests it may lead to joint or comparative research, e.g. EPTA. A more formal network is INNOTECH. Involvement in such activities is normally voluntary and incidental, according to personal wish.

Training of scholars normally takes place in regular training programmes. Some countries, however, offer scholarships/study grants for junior or senior staff to spend a sabbatical or training period at another institute in the North (or the South). In the Netherlands such facilities are limited. They are more common in Norway, Sweden, Canada and the United Kingdom.

In many countries staff and students have limited opportunities for research and research training. In this respect longer-term research programmes are recommended in which both senior and junior staff participate and which are facilitated by donor agencies.

Some final remarks can be made on North-South co-operation in educational research and development:

1. Within the South there is a great variety among the various universities and educational institutes.

2. There is a gradual shift in the North-South relations, from technical assistance to academic co-operation on a basis of reciprocity.

3. Both in the North and the South networks are being set up. There is a growing awareness of the need for and use of more exchange and co-operation. Examples on the North are NORRAG, ERASMUS. In the South SEARRAG, ERNESA and others, INNOTECH, REDUC, etc.

4. Co-operation, in any mix of technical assistance or academic exchange, can be achieved in a number of fields:
   1. Institution Building:
      - material:buildings, equipment. In such cases usually a donor agency sponsors a project in which it deploys Northern institutions;
      - staff :fellows from the South and trained in the North or in the South by colleagues from the North. Staff training includes courses, (PhD) degrees, etc.

   2. Curriculum Development:
      Fellows from the North assist in developing curricula and teaching aids. This is often based on Northern experience and research.

   3. Research:
      There is often a shortage of staff time and funds for the proper development of teaching aids, teaching methods, pedagogical theory and applications. Some international donors support research projects, preferably to be done by local researchers, though in many cases researchers from the North are involved.

   4. Documentation and publication:
      In many countries there is a lack of documentation. Much documentation is still only available in the North. Exchange of information in and among countries in the South needs improvement. An effort to overcome this is REDUC. It is difficult for researchers in the South to publish (lack of research data and documentation, irregularly published periodicals, lack of publishing and printing facilities, costs).

8.
Summary: where do we go from here?

Education is the process through which a new-born individual becomes an integrated member of its community. It is the main agent in the transfer of culture (Dubbeldam 1988: 8). Yet, research into the cultural aspects of and around education and learning processes do not immediately lead to concrete and applicable results (Dubbeldam 1988: 20-21). This is in contrast to, for example, research into school organization, cost-benefit analysis in education and some forms of skill training. Nevertheless, Dubbeldam considers it important that governments and donor organizations pay more attention to this type of research, as it is held to be fundamental to the design of curricula, teaching materials and methods. This type of education will eventually be beneficial to the efficiency and impact of education. Therefore Dubbeldam expresses the hope that the World Decade of Cultural Development, proclaimed by the U.N., 1990 as the international literacy year and the 1990 World Conference on Basic Education for All will pay more attention to the cultural component in and around education in developing countries.

Education is not only confined to the school system but includes all learning processes outside the classroom, whether non-formal or informal. A consequence of educational development is that people have high expectations concerning educational achievements, particularly in relation to better job opportunities after schooling. Dubbeldam noted further that many in the first place desire to share the socio-economic advantages and to escape from rural poverty or too strong family ties. Unfortunately a school certificate no longer automatically leads to a job, prestige and better material conditions. Generally officials and educationists agree that education, and especially school education should prepare the youth for life within society. But the question is for which society, the present or the future (Dubbeldam 1988:15-16)? Would it not be better to equip the youth with appropriate abilities and skills to survive in a rapidly changing society? Could indigenous learning processes be useful within the society at present?

One of the factors in improving education is the upgrading of the quality of teaching. Proper utilization of educational technology (such as programmed instruction, interactive radio) may compensate for

deficiencies in pre-service teacher training or directly improve the quality of instruction.

Against such a backgroud many questions were raised concerning various issues in the field of education and training, and about research, its problems and possibilities. Specific comments were made concerning past and future research tasks for CESO.

The following sections of this final chapter contain a review of the main issues discussed. The selection was made by CESO. A complete picture can be obtained from the symposium papers published elsewhere and by consulting the previous chapters.

(1) Answers to questions; a review

The symposium was organized on the occasion of CESO's 25th anniversary. Its prime purpose was not just to look back to the past, but to invite participants to make suggestions, through their papers and the discussions, which gave a large and varied number of suggestions for research. They included topics deserving more attention or priority, suggestions for solving problems in the research environment and ideas for organization and collaboration. In the following sections a selection of topics will be reviewed, indicating research issues that deserve more emphasis and sponsoring for the improvement of the educational situation in general, and which may more specifically help CESO to formulate its future plans and activities. CESO hopes that some of the ideas will stimulate not only the research community but also the donor agencies interested in education. In the Netherlands context one may hope that the suggestions from the symposium will contribute to the programming of Netherlands research and stimulate the interest of the Netherlands government in true education research.

The symposium did not give answers to all questions put beforehand by CESO since these could only be answered by doing research and not by discussion. However, the papers and discussions gave more insight into the state and the nature of the problems met in education and current research activities. One of the major results of a symposium such as this is that it has brought researchers together for an exchange of experience and a discussion of basic issues. It also opens up communication channels and networks. CESO hopes that the papers and the report, once published, will find a wide circulation among those people who were unable to participate.

(2) Equality in access to education

During the symposium it was again stressed that there are still great disparities in educational opportunities. In many countries this is true for women and girls and for people in rural areas in general. Furthermore for (cultural) minorities, refugees and the poor.

This problem persists within the context of educational systems that have

not lived up to the expectations formulated during the sixties and early seventies. Even though serious efforts were made, school systems could not enroll all children at the basic school level and illiteracy is still increasing in absolute numbers in many countries. It is not only a quantitative problem of numbers of people being refused access to education and training, but also a qualitative problem in the sense that people do not get relevant education of a good quality.

Non-formal education was believed to save the situation. It has shown to be a useful addition and alternative to formal education for specific training, especially in vocational subjects. However, it seems it cannot replace formal education as a system. Given the urgency and massiveness of its problems and in view of objectives to step up the provision of basic education for all, the primary level needs the first attention. Yet, from a structural point of view, there will be a need to look proportionately into the secondary and tertiary levels as well.

There seem to be two areas in which CESO could be engaged in research. One is research into the causes and nature of inequality in access to education and developing methods and materials to diminish the lag for specific groups. The second is to identify the needs of specific groups (or individuals) and develop learning materials and teaching methods so as to serve specific (mostly vocational) training, pre- or in-service. In either case research should depart from the cultural capacities and needs of the people to make their lives more productive.

The basic assumption in the first topic is that the barriers to formal education are socio-economic and cultural ones. It is believed that non-formal education can be a helpful instrument in offering people specific education and training where there is no access to the formal education system. In this context literacy and vocational training may be regarded as substitutes for formal basic education. At the secondary level primary school leavers are in a similar situation once they cannot enroll into secondary education. After the primary level the selection mechanism is even more severe: examinations, lack of pupil's places and money to pay school fees bring an end to many a school-career. In certain respects a comparable situation exists at the tertiary level. In addition, many countries do not have, or cannot afford, specific vocational or professional education, because of which students have to go abroad for training.

With respect to the second topic the assumption is that there are (sub-) cultural groups that have on the one hand specific needs, different from the mainstream in society, which call for specially organized education. On the other hand they have specific capacities that can be employed in the teaching/learning process. Neither such particular needs nor capacities are normally part of the curriculum of national, formal education systems. This category is about education or training in place of or in addition to other, formal, systems.

(3) Education and Production

Education and Production is a theme pervading all types of education, be it formal, non-formal or informal. The topic has often been discussed and many efforts have been made to relate education to production. It was therefore a shock, during the symposium, to hear that much literature on education with production is mere advocacy, neither a proper description nor evaluation of the various programmes and experiments.

In the discussion on the conceptual issues a distinction was made between 'education for production' and 'education with production'. While the aim of the former is more in the economic sphere and directed to the labour market, in the latter it is more in the social and moral spheres, though not excluding the economic dimension. Educational programmes related to productive life are not limited to skill training but must necessarily also embrace social and cultural attitudes and values. There is a wide variety both in formal, non-formal and informal education. An important issue is to make the right decisions as to what topics to offer in what type of education or training. The discussions underscored again that the choice of the form and content of teaching should be arranged from the proper conceptual starting point.

Important dimensions in connection with either concept are social and cultural aspects on the one hand, and economic aspects and employment opportunities on the other. Education with production as a concept, while official policy in several countries, is not a dominant mode of thinking and it still takes a modest but rather controversial place among various schools of thought concerned with the relation between education, work and society. As specific problems teacher training and financial and institutional implications were discussed. The papers and oral contributions illustrated the variety of applications and experiences.

The wide variety in interpretations of the concepts and experiences not only revealed the need for networking but also for more comparative and collaborative research. Specific research areas mentioned were about the ways students are allowed to link classroom theory with practice, and in how far they are exposed to a range of production processes. There seems to be ample room for research into learning processes and their effects.

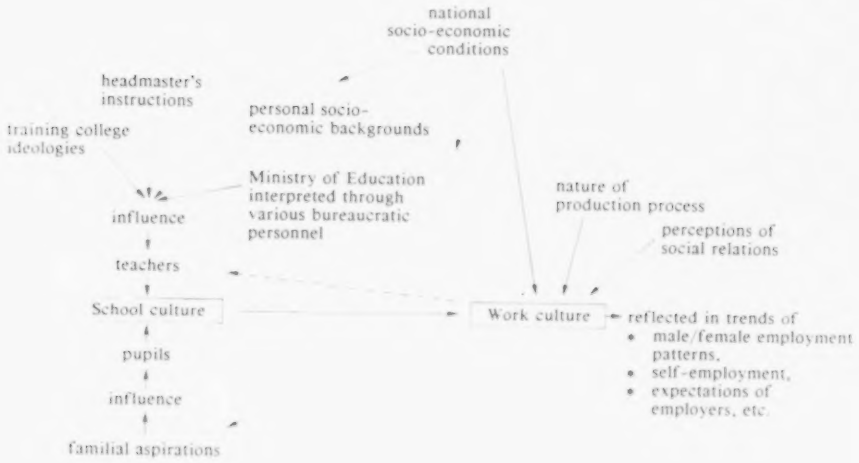
The participants came to the remarkable conclusion that more data are needed on what men, women and children do in the daily routine of their lives. If the aim is to improve the quality of life, due attention must be paid to the life problems of the people and their needs prior to the identification of their learning needs. This again seems to have been an area of great recommendation but too little practised by researchers and practitioners. It calls for comparative, interdisciplinary research in close relation to practice.

(4) School and Work Cultures

There is a common element in the themes 'education and culture' and 'education for productive life' in proposed studies of problems in the link between 'school culture' and 'work culture'. Both are influenced by the pervading national culture and the socio-economic climate, yet through different 'filtering' channels. School culture is, in its final stages, determined by teachers and pupils. The teachers are influenced by for example the ideologies in the training colleges, the headmaster's instructions, personal socio-economic backgrounds and the perceptions, ideologies and policies within the Ministry of Education. The pupils on their part are influenced by their (sub-)cultural backgrounds, personal and familial expectations and their perceptions of the (future) labour market.

Work culture is determined by factors such as the prevailing and changing socio-economic conditions, the nature of the production process and perceptions of social relations. It is reflected in trends of male/female employment patterns and forms of (self-)employment. How work and school culture are determined can be seen in figure 4.

Fig. 4. Determining work and school culture



Issues to be studied include an analysis of various interactive sub-cultures viewed within the context of a school that can determine or at least influence the work culture. What are the causes for the difficulties in establishing a congruent relationship between the school and work culture? What are the incongruences between these two and intervention strategies? How are the school and work cultures reflected in the formal, non-formal and informal sectors ?

These questions can be raised both for formal schooling and non-formal education, and both for the formal and informal employment sector.

There is a growing interest in these issues about which, it seems, still too little is known. Some researches are conducted elsewhere, as was shown in the case study on the informal sector in the Philippines presented at the symposium. CESO has not yet entered this particular field of study though it has shown some interest in it lately. It seems, however, that the issue is basic to other questions concerning the relation between education, production and work, both regarding the content and the format of the teaching/learning process to be applied. Research into these issues should therefore be encouraged. Since CESO is engaged both in research concerning education and culture as well as education with production it should consider including this topic in its research programmes. This type of research may be regarded as highly relevant for industrial development.

(5) The teacher in a focal position

It is generally agreed that the teacher fulfills a crucial role in the educational process. The teacher is the focal point, in whom all issues come together: national policy, the demands of society, the requirements of running a school or stimulating and monitoring the teaching/learning processes and the translation of the objectives of the nation, of the learners and society into a workable curriculum.

In the literature and discussions about education in developing countries many roles and tasks have been ascribed to the teachers. High expectations were formulated, an almost saintly devotion to their job was often expected. In some instances individual teachers responded to these expectations.

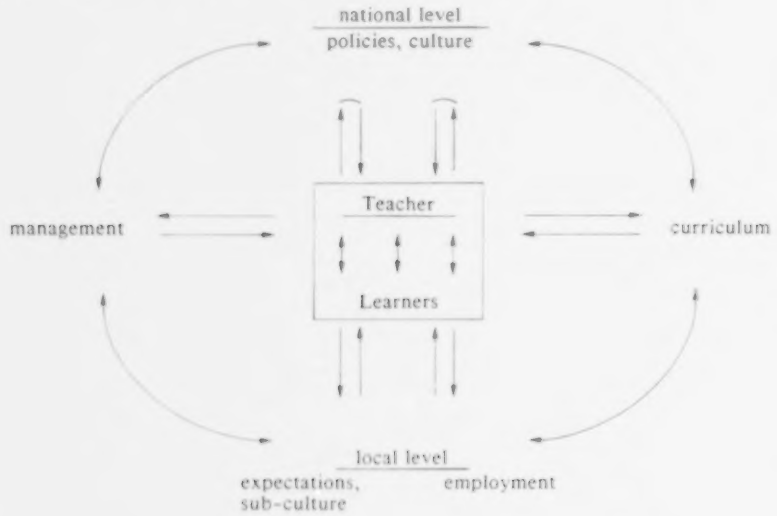
They managed to do so partly because of their personal capacities and creativity, partly because of relatively favourable circumstances. In the majority of the cases it was proved that teachers are no magicians. Many have to work under very difficult circumstances: inadequate training, low income, inadequate material facilities and teaching equipment, shortage of qualified school staff difficult cultural, social, economic and political environment.

Given the individual peculiarities of each situation, there are no generally applicable prescriptions to solve the teachers' problems. It would

be a great achievement to begin with if it were possible to come to an analysis of the role and functions of the teacher and to make suggestions for approaches to their problems in their specific situations. Such an analysis and suggestions should in the first place be realistic.

Research and policy should start from the point of view that the teachers: 1. in the first place have to function in relation to the learners; 2. are sandwiched between the national policies and society's demands, specifically people's expectations, employment conditions and local socio-cultural situations; 3. have management functions as well as a responsibility in the design and realization of the curriculum. These three relations are illustrated in the following figure 5:

Fig. 5. Teacher-learner relationship in asocietal context



This figure indicates the relations between on the one hand culture and policies at the national level and sub-culture, expectations and market at the local level, and on the other hand the teaching/learning situation, the management function and the curriculum design and implementation.
Research can focus on one or more of the five component elements represented here, but should never do so in isolation from the other elements.

In the past research mainly concentrated on the national level, less - through case studies - on the local level and inadequately on the curriculum, the teaching/learning situation and - least of all - on the managements aspects. During the symposium a plea was made for research into the management of education, relating to the management of the education system as a whole, but specifically concentrating on to the management at the school level. The issue is on the research agendas of some institutions, for example INNOTECH, which is searching for a sponsor for this type of research. More research should also be done in the classroom, or more broadly on the teacher-learner interaction in various forms of education and training. Local research institutes should be encouraged and supported in this field. Some educational projects through research and development cover more than one of the items pictured bove, as was the case in the Delsilife project presented during the symposium.

CESO could participate in research in one of the fields, in collaboration with national or regional institutes, specifically in social and cultural issues and the development of teaching aids. Other national and international institutes have already concentrated on some items on a national level (such as educational planning, economics of education, social aspects). CESO should keep informed of their work, but there is no evident reason to enter into this broad field now.

In various instances suggestions were made to improve the efficiency and effectiveness of the educational systems and programmes, for example in the management, financing and organization of systems. Others advocated strengthening the position of the teachers/trainers. In addition to adequate employment and work conditions various types of training were suggested, for instance in school/course management, development of teaching aids and teaching techniques. A support system, from which teachers can draw according to their needs and abilities can be a useful instrument for a teaching body working under varying conditions. Research and experimentation along these lines are recommendable. Also CESO may consider a renewed attention for the teachers/trainers.

(6) Different systems

There was an interesting discussion on the merits of different educational systems, concentrating on the colonial versus traditional models. Many of the present education systems were founded during the colonial period. It was in this period that mass education developed and spread in the countries of the Americas and Europe. In many developing countries schools had long ago been established by religious organizations or colonial governments, but the formal systems based on northern models one by one were shaped during the first half of the present century. Just as much as the educational theories and systems in the northern countries influenced each other, they extended their philosohpy, content and organization to the colonies. Many traditional education systems were neglected, replaced or abolished. Symposium participants warned against making sweeping statements about the positive or negative effects of either. Though the imported systems often bypassed existing cultural reality, the traditional systems often could not cope with the social, economic and technological realities of the modern world.

In order to utilize the merits of either system, participants suggested cross-national studies of traditional, colonial and alternative models of education. Comparative studies of this nature lead to such issues as the dichotomies between national policies and local culture and between uniformity and diversity. Closely related issues exist in other fields, such as social development or science and technology education. Here is a complex of related issues, in which studies on indigenous learning systems, value education and on cognitive structures are essential

elements, which deserve new attention removing the old biases held by educationists, politicians and others.

(7) Indigenous learning systems

Though a subject in its own right, research into existing indigenous teaching and learning systems is part of or closely related to the research topics mentioned above. The interest in indigenous learning systems has revived since experience showed that in many places schooling was not supported by or rooted in the learner's cultural environment. Processes of socialization in the family and community are an essential part of the system. But it also extends to skill training, such as in apprenticeship training of crafts and agriculture.

Important questions here are what and how people learn outside the interventions of the formal school system; how their indigenous knowledge and learning processes mix or conflict with the knowledge and learning in the school system; what the effects of these are on an individual's functioning in a situation of change and development. Research into indigenous knowledge and learning systems is conducted in a number of countries and a few years ago CESO started exploring this field. During the 1988 symposium organized by CUSRI and CESO in Thailand it turned out that more research had been done into indigenous knowledge than into learning processes.

For the development of education and training it is essential to gain more insight into the relation between the two learning systems. The participants suggested more research into indigenous learning systems specifically in view of its utilization in changing situations and of assessing future possibilities for their integration into the educational system. They asked specifically for the identification of indigenous elements applicable for sufficiently large target groups and for the development of research methods that may enable local educators to identify and apply usable elements in regular educational programmes. This applies to school education as well as training and non-formal programmes.

Two specific research topics were mentioned in this field. One is research into cognitive structures underlying the perceptions and logical frameworks of a culture. Another topic includes studies of indigenous leadership and management systems.

(8) Non-formal education

Participants stressed the necessity for non-formal education programmes to be user-specific, taking into account their cultural background, value systems, living conditions and learning needs. Papers contributed to the symposium illustrated these aspects. Non-formal education programmes can be work and skill oriented, but also offer social skills and attitudes.

Much attention was asked for the approaches and methodology. Discrepancies were noted between the principle of the learner's participation and the results of the programmes. It was stated that there is also a gap between the practice of the programmes and scientific theory and foundations.

There are still questions about the socio-economic, cultural and ecological factors that facilitate or inhibit the introduction, acceptance and execution of non-formal education programmes. Non-formal education by its very nature cannot replace formal programmes. Yet case experiences should be made available to larger programmes or social movements.

Such research, at the same time avoiding loss of quality, was suggested. In the context of non-formal education there was an interesting discussion about 'leisure studies'. Research was proposed into the perceptions of leisure among different sectors, and into time utilization. A similar suggestion had been made before in the context of education and/with production. Time utilization studies have been carried out by sociologists and economists. Somehow one feels that educationists have failed to make the connection. Awareness of people's time utilization should be an essential part of the preparation of educational programmes. A state-of-the-art review of existing programmes, projects and researches was asked for.

(9) Literacy

Huge efforts have been made in literacy programmes during the past decades, yet for various reasons (population growth, insufficient pupil's places, lack of relevance and applicability) the absolute number of illiterates in the world is still increasing. More and more follow-up of programmes and relations with other development activities are sought for in order to make literacy work effective. One aspect emphasized was 'how to design literacy programmes combining basic job-related skills'. An inventory of research topics was presented by Ooijens and Van Kampen (1988), based on the internal and external factors that might be of influence on the functioning of literacy projects and their results. Special attention was asked for the position of women and cultural minorities involved in literacy projects. In the light of the international literacy year and the conference on basic education for all, literacy and supportive research should get more attention.

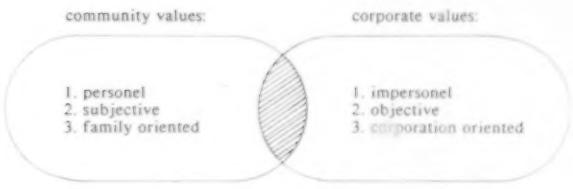
(10) Value education

One item emphasized by the participants during the symposium was the need for research into value education. Especially in the South-East Asian region this topic is drawing attention both among governments and researchers.

In the discussions 'values' both old, traditional values and new values.

About the latter little is known. Yet values are basic to the educational system and process, to the curriculum, the teaching methods, the media, parents-teacher relations. They are also crucial for the access to education and people's expectations. Value education should not only be seen as a key to understanding or applying education, but also as a policy instrument at national and local levels. There is a distinction between values held by the actors in the education process and values to be taught in education. In its former

Fig. 6. Value Scheme distinguishing between community values and corporate values



interpretation research into value education is closely related to studies of indigenous learning, in its latter meaning specifically to educational policy for nation building and development.

Value education is stimulated both by governments and educational agencies in various countries. Since values touch upon the core of culture, and even more upon sub-cultures, it is a highly political area of research. Moreover it requires a great ability and willingness to understand and describe it objectively. This is a serious problem for researchers, both nationals and foreigners. Technically it demands a large number of case studies that may only be fully appreciated if the results are analysed on a comparative basis. It seems useful to discuss and evaluate the results of such case studies in a forum of national or international researchers. Such discussions should be joined by official and social authorities. In this respect the work done by SEARRAG, which published a number of reports on value education in member countries, is an appreciable first step.

Another initiative by scholars from India, Indonesia and the Netherlands was picked up by NUFFIC. This led to an informal network of scholars from the three countries into which CESO joined, which is meant to be continued and possibly somewhat expanded.

(11) Use of the media

In various instances the discussions dealt with the importance of the use of educational materials and audio-visual media in the various learning processes and the development of educational technology. Applications are found at all levels and in all types of education. They can play a very specific and useful role wherever formal education still falls short. A modern example of this is found in distance education. Media in their various forms are expressions of and reflect culture. Their use can therefore not automatically be copied from other cultural settings.

There is extensive literature on the use of media in various educational contexts. Still lacking, however, is a clear insight into the effectiveness of the media with respect to specific contents, learning objectives, learning contexts and user groups.

The participants stressed the need for an integrative review of studies on the various types of media in teaching and learning situations in developing countries. Specific attention was asked for the effects of media on formal education and on national development.

(12) Research

During the symposium it frequently turned out that in many educational issues research is still lacking. Not because the researchers are not aware of the problems, but because of a variety of other, sometimes external reasons.

In many countries there still is a lack of researchers and a lack of training and experience in research. Professionals in education in governments are often too preoccupied with their administrative affairs. Those in academic institutions have to cope with heavy teaching commitments to large numbers of students. They have their administrative duties and more often than not they have to cope with a shortage of funds and facilities, such as communication, transport, availability of basic statistic data, equipment to process information, a lack of or outdated documentation. There is no single solution to these problems. A number of simultaneous actions will have to be taken if the situation is to be improved within a reasonable time span.

The general feeling was that governments should be willing to show a greater interest in educational research. The financial issue is a problem. Many governments have tight budgets. In such cases the international community has to be called upon for assistance. Therefore it is important to give a high priority to the support of educational research. A better financial basis may help for most of the problems listed and discussed in the previous chapters. But this is not the only condition for the improvement of research.

The participants agreed with the ideas held by many governmental and international organizations, being that research should preferably be of an applied nature. One can think of research consigned for policy

purposes or for wider development projects. Yet, such research will have to be anchored in a proper theoretical ground. No country can do without it or leave it to others, however much it can draw from foreign research results. Consequently an appeal needs to be made upon national authorities and the international community to create room for even a minimum of fundamental research.

Serious efforts are needed on the part of authorities and researchers to reach an understanding on the value and applicability of research. For the researchers this implies an awareness of the needs of the governments and for the latter a willingness to appreciate and apply the results of research made available, for example starting by alleviating administrative constraints for research or even supporting it officially.

Researchers on their part could improve efficiency and effectiveness through a multidisciplinary approach, knitting together yet leaving sufficient room for the interests of different disciplines. They would also need to find practical ways of spreading information about their plans, action and results as widely as possible. A plea was made for the use of anthropological, ethnographic studies. These will, however, have to be based on both qualitative and quantitative data. Therefore the support of other disciplines will be needed.

Essential elements for building a national research capacity are training and documentation. Research training programmes for students and young graduates are needed. For older researchers exchange programmes or study periods abroad are useful. Internationally speaking, research institutes and donor agencies should find more regular ways of support. They should be achieved by assistance to setting up national data bases, in more freely supplying educational institutions with publications and other material, and by creating studying facilities.

Participants to the symposium questioned the usefulness of participatory research. On the other hand it was argued that a proper needs identification is vital in close co-operation with all parties concerned. They furthermore stated that existing capabilities of all actors have to be assessed. Finally research procedures should be open and clear.

The symposium, to which were joined meetings of the Research Review and Action Groups and the EPTA network, again showed the need for and the usefulness of networking between institution- based researchers. The initiatives taken by for instance IDRC and SIDA in support of networking, including comparative and collaborative research, need to be followed by other donor agencies. This type of activity seems to be a fruitful object of donor co-ordination. Also international organizations and their regional centres can play an important role in this.

Networking implies some kind of co-ordination and regular, organized communicaton, by one of the partners in the network. It should be organized in such a way that no formal bureaucratic organization can arise. Still there are - be they modest - financial consequences in terms of

staff time and means of communication. A maximum of partnership and individual initiative is needed. In addition to facilitating the flow of information, such a co-ordinating centre could mediate to donor agencies. During the final days of the symposium CESO was called upon to fulfill a co-ordinating role in the EPTA-networks, which is under consideration. Evidently such a network, in order to function effectively, needs the recognition and sponsorship of a group of donors.

(13) Suggestions for CESO

In some papers comments were made about CESO's past and future role, and in the discussions and personal encounters CESO was called upon to be engaged in activities in research, networking and documentation exchange.

CESO's role as a centre was well appreciated and there appear to be many reasons to maintain and strengthen this position. A solid base is its library and documentation unit. Within the Netherlands CESO may continue to play a central role in stimulating communication and co-operation among researchers, linking the national network to international ones. In this respect CESO's co-ordinating role is appreciated by researchers, rather than the actual management of research carried out by others.

On the international level CESO should actively participate in a number of relevant networks such as the RRAGs, REDUC or EPTA (cf. the previous section). In this area CESO could play an intermediary role between researchers and financing agencies. Yet its role as a 'partner', a 'colleague' should be predominant.

Given the size of its staff CESO cannot implement broad studies such as the large international organizations can do. There seem to be prospects of collaborative research, which would offer opportunities to participate in wider research projects, in which CESO may contribute within the range of its own expertise.

CESO's 'anthropological' approach to education was well appreciated. It was interesting to note that participants showed great interest in the use of ethnographic research. Finally new ideas were presented for the centre's future research programmes which will be used in drafting the next medium-term plan.

(14) Conclusions

A wide range of research issues were suggested during the symposium. Some were common themes, others were specific to national or local circumstances. A number of topics were singled out and will be listed below in terms of key-words. For details reference is made to the earlier chapters and the other publications resulting from the symposium. Again it is remarkable that few issues were linked to specific forms or levels of education, except for those inherent to certain forms or levels, such as

entrance to school education or literacy training.

Such issues as training of teachers/trainers, management, relation to work etc. can be found at all levels, though with their own peculiarities. No geographical limitations have been made, though many cases presented showed the particular needs and possibilities of individual local situations. The following research topics were suggested:

1. Improvement of efficiency and effectivity in education.
2. Teachers/trainers support systems.
3. Comparative studies of educational systems (formal, non-formal, informal, indigenous).
4. Cultural and economic barriers to education.
5. Literacy functional to users' cultural and work situation.
6. The relation between the classroom/teaching situation and the learners' cultural and economic needs.
7. The relation between school culture and work culture.
8. Value education.
9. Effectiveness of media with regard to the cultural environment of the learners.
10. Development of appropriate teaching/learning methodology and materials.
11. Balance between general and vocational studies/training in formal, non- formal and informal programmes.
12. Indigenous (vocational) learning systems/processes.
13. Improvement of research environment.

In addition, some conditions were mentioned for the improvement of educational research, being important means to achieve the set goals:

1. Interdisciplinary, collaborative and comparative research.
2. Networks of institution-based researchers.
3. Development of research methodology allowing for the cultural environment.
4. Research training and study facilities.
5. Improved information, documentation and publication systems.
6. Increased government support for research.
7. Co-ordinated multi-donor support.

In the above listings no priorities of topics were made. Many of the topics are closely interrelated. Any choice will depend on the priorities of the actors concerned and particular circumstances.

A debate on matters connected with cultural identity, or, more broadly, 'culture' is in full swing. It plays an important role in education. For years now Dutch government agencies have been debating these issues. In an international context it is important to note that the United Nations and UNESCO have declared 1988-1997 to be the world decade for cultural development. The other specialized agencies of the UN will

also devote attention to cultural development in the world. The past decades have seen the spotlight focused on economic and social progress and on the quantitative and financial problems of education. It is now time to look at the social developments related to the cultural context in which they are taking place, with specific reference to education.

Annexes

1) List of participants
2) List of papers prepared for the symposium
3) Abstracts of the papers prepared
4) Biodata of the participants

Annex 1

List of participants

Karamat Ali
Pakistan Institute of Labour Education
P.O. Box 8032
Karachi - 29
Pakistan
92-21 445485

Biazen Anbesu
Curriculum Department
Ministry of Education of Ethiopia
P.O. Box 2346
Adis Ababa
Ethiopia
0410-12 70 00

Elegio B. Barsaga
INNOTECH
P.O. Box 207
U.P. Diliman, Quezon
Manila
Philippines

Wim E. Biervliet
CESO
P.O. Box 90734
2509 LS The Hague
The Netherlands
(070)3510591

Ad J.J.M. Boeren
CESO
P.O. Box 90734
2509 LS The Hague
The Netherlands
(070)3510591

Udo Bude
German Foundation for International
Development
Hans Böckler Strasse 5,
D- 5300 Bonn 3
West - Germany

Antonio Cabral de Andrade
ILO
4, Route des Morillons
CH-1211 Geneva 22
Switzerland
41-22-99 7834

M. Carton
IUED
24, Rue Rothschild
1211 Geneva 21
Switzerland
41.22.325982

Bernhard Chambulikazi
University of Dar es Salaam
P.O. Box 35044
Dar es Salaam
Tanzania
49192 ext. 2214

Cheng Kai Ming
Department of Education
University of Hong Kong
Hong Kong
5-8592543

Oscar Corvalan
CIDE/IUED
P.O. Box 13608
Santiago de Chile
Chile
56-2-6987153

Anke van Dam
CESO
P.O. Box 90734
2509 LS The Hague
The Netherlands
(070)3510591

Ramesh C. Devkota
Non-Formal Education Centre
P.O. Box 4347
Kathmandu
Nepal

Emiel Droogleever Fortuijn
Universiteit van Amsterdam
Oude Hoogstraat 24
Amsterdam
The Netherlands
(020)5252228

Leo F.B. Dubbeldam
CESO
P.O. Box 90734
2509 LS The Hague
The Netherlands
(070)3510591

Nadejda Ebel
Training Policies Branches
ILO
CH-1211 Geneva 22
Switzerland

Kees Epskamp
CESO
P.O. Box 90734
2509 LS The Hague
The Netherlands
(070)3510604

Lydia van de Fliert
Joh. Braakersieklaan 11
2283 GV Rijswijk (Z-H)
The Netherlands
(070)1948251

Fluitman
Programme Development Section
Vocational Training Branch
ILO
4, Route de Morillons
1211 Geneva 22
Switzerland

J.C. Gatchalian
University of the Philippines
P.O. Box 116
Diliman, Quezon City
1101 Manila
Philippines
63.2.996396

Zainal Ghani
Projek INSPIRE
Universiti Sains Malaysia
Panang, Malaysia
1200
(04)885414

Monica Granados
Apdo Postal 55
2200 Coronado
San Jose
Costa Rica

Aklilu Habte
The World Bank
1818 H. Street, N.W.
20433 Washington D.C.
U.S.A.
(202)477-1234

Wim Hoppers
CESO
P.O. Box 90734
2509 LS The Hague
The Netherlands
(070)3510591

Zellyne D. Jennings
Department of Educational Studies
University of the West Indies
Mona, Kingston 7
Jamaica
1.809/2-72130

Kan Feng Min
Foreign Language Department
Beijing University of Aeronautics and Astronautics
Beijing
China
2017251-457

Ulla Kan
University of Botswana
P/Bag 0022
Gaborone
Botswana

Eileen Kane
St. Patric's College
Department of Anthropology
Maynooth
Co. Kildare
Ireland
(01)285222

Adri Kater
CESO
P.O. Box 90734
2509 LS The Hague
The Netherlands
(070)3510591

Kenneth King
University of Edinborough
c/o Eastern Salton Hall Percaitland
East Lothian EH 34 5DS
Scotland

George A. Malekela
University of Dar es Salaam
P.O. Box 35048
Dar es Salaam
Tanzania
051-49192 ext. 2303

Taka Phineas Mudariki
ZIMFEP
P.O. Box 298
Harare
Zimbabwe
707716/796432

Hena Mukherjee
Commonwealth Secretariat
Marlborough House; Pall Mall
London, SW1Y 5HX
Great Britain
01-839 3411

Toshio Ohsako
UNESCO
Division of Educational Sciences
Contents & Methods of Education
7, Place de Fontenoy
75700 Paris
France
4568-0812

Jan Ooijens
Institute for Cultural Anthropology
Rijksuniversiteit Utrecht
Heidelberglaan 2
3584 CS Utrecht

Soehirman Patmo
CESO
P.O. Box 90734
2509 LS The Hague
The Netherlands
(070)3510591

Luis Pereira
INDE
Rua Comandante Augusto Cardoso 81
Maputo
Mozambique

Gerhard Peter
CESO
P.O. Box 90734
2509 LS The Hague
The Netherlands
(070)3510591

J. Riberu
Atma Jaya University, Research Centre
P.O. Box 2639
10001 Jakarta
Indonesia
62.21.5801494

C. Ringeling
p/a familie Tull
Wanicastraat 168A
Paramaribo
Suriname

Rogier van 't Rood
Prinses Wilhelminastraat 17
2313 AV Leiden
The Netherlands
(071)134174

Daniel N. Sifuna
Kenyatta University
Faculty of Education
P.O. Box 43844
Nairobi
Kenia

Jose B. Socrates
INNOTECH
P.O. Box 207
U.P. Diliman, Quezon
Manila
Philppines

Kla Somtrakool
Ministry of Education
Department of Non-Formal Education
10300 Bangkok
Thailand

Tarwotjo
University of Terbuka
P.O. Box 6666
10001 Jakarta
Indonesia
62.21.7490941

Leonardus B.M. Tomesen
Bredasestraat 52
4611 CJ Bergen op Zoom
01640-57288

Vichai Tunsiri
Ministry of Education
Department of Non-Formal Education
10300 Bangkok
Thailand

T.K.N. Unnithan
P-3 University Campus
University Rajasthan
Jaipur, 302004
India

Shobana Malini Verghese
Ashok Hall Girl's High School
5A, Sarat Bose Road
Calcutta 700017
India
033-44-1271

Jan Visser
INDE
Rua Comandante Augusto Cardoso 81
Maputo
Mozambique

Yibing Wang
Unesco
Permanent Delegation of the
People's Republic of China to Unesco
1, Rue Miollis
75715 Paris
France

Beverly Young
The British Council
10 Spring Gardens
London SW1A 2BN
Great Britain
01-9308466

Annex 2

List of papers prepared for the symposium

Barsaga, Elegio B.
Case Studies of indigenous Learning Systems: Implications to Formal and Non-formal Education
December 1988

Biervliet, Wim
The Design of a Programme for North-South Collaborative Educational Research : Balancing between Bondage and Razors Edge
November 1988

Boeren, Ad
Developing Training Materials for the Dissemination of Delsilife
September 1988

Cabral de Andrade, Antonio
Formation-Production: l'Experience de l'Amerique Latine et des Caraibes (Education-Production: the Experience of Latin America and the Caribbean)
November 1988

Catz, Tania
Promoting the Publication of Research in order to Link Research more closely with Practice : A Survey of the question
Unesco Paris, 1988*

Chambulikazi, Eberhard
Theatre as a Communication Medium in Community Development
September 1988

Cheng Kai Ming
From Education to Work: the Cultural Dimension
November 1988

Dam, Anke Van and Gerhard Peter
Recent Discussions on Popular Education in Latin America
November 1988

Devkota, R.C.
Non-formal Education and Rural Development in Nepal
November 1988

Dibaba, B., D. Mekuria and K. Mellese
Elements of Education with Production in Ethiopian Education System.
December 1988

Droogleever Fortuijn, Emiel
Methodological Reflections on the Evaluation of Work-related Programmes : the Evaluation of Evaluation Research Practices
November 1988

Dubbeldam, Leo F.B.
Culture and Education : Education as the Agent of Transfer or Change
November 1988

Epskamp, Kees P.
Curricula, Credits and Certificates: about Formalizing Expressive Skill Training in Performing Arts
November 1988

Gatchalian, Jose C. and Miflora M. Gatchalian
Coping for Survival: Focus on the Participants in the Underground Economy of Manila
October 1988

Ghani, Zainal D.
Searrag - Creating support and linkages for educational Research in South East Asia
December 1988

Habte, Aklilu
Educational Development : the Challenge of Bridging the Gap
November 1988

Haket, Lenneke
CESO Publications : 1963-1988 : Bibliography
November 1988

Hoppers, Wim
Education and production in theory and action (EPTA): learning from networking in East and Southern Africa
November 1988

Jennings, Zellynne D.
Innovation in Tertiary Education in the Caribbean: Distance Teaching in the Faculty of Education at the University of the West Indies
November 1988

Jennings, Zellynne D.
Facilitating the Transition from School to Work: a Study of the Effectiveness of Work Experience Programmes in Secondary Schools in the Commonwealth
November 1988

Kane, Eileen
Education, Culture and Productive Life: Taking a Problem Orientation December 1988

Kater, Adri
The Application of Research into Indigenous Knowledge and Learning : Some Problems
November 1988

King, Kenneth
Aid and Educational Research in Developing Countries : Dutch Perspectives
November 1988

Lenglet, Frans
Preliminary list of Issues and Topics in the Field of Education and Development, that might be Considered for Programming Research Activities in the Netherlands (and in developing countries).
December 1988

Malekela, George A.
Educating for Self-Employment at the Primary School Level : Tanzanian Experience 1967-1987
November 1988

Min, Kan Feng
Girl's Participation in Technical and Vocational Training
November 1988

Mudariki, P.T.
Culture, Productive Life and Adult Education - the Case for Zimbabwe
November 1988

Ohsako, Toshio
Some Reflections on Research Priorities in Education for Developing Countries
December 1988

Ooijens, Jan L.P.
Education and Cultural Identity in Colombian Amazonia

Ooijens, Jan and Paul van Kampen
Research and Adult Literacy in the Third World
November 1988

Patmo, Soehirman
Traditional Learning: the Training of Dalangs
October 1988

Riberu, J.
A National Cultural identity in Process : Indonesian Experiment
November 1988

Ringeling, Cynthia A.
Scientific Research in Surinam: An Impasse or an Obstacle - A Project Proposal Precariously Packaged
December 1988

Sifuna, Daniel N.
Self-help Technical Training Institutions and Education with Production in Kenia: the Case of Youth Polytechnics and Harambee Institutions of Technology
October 1988

Socrates, Jose B.
Improving the Quality of Life : the Delsilife Way
November 1988

Somtrakol, Kla and V. Tunsiri
Education for Productive Life
November 1988

Tarwotjo
A Suggestion for One of the Priorities in the Field of Educational Research Based on the Case of the Village of Harapan: a Preliminary Study of a Relatively Remote Village in Central Java, Indonesia for Educational Planning and Village Development
November 1988

Tomesen, Leon
Transfer of Technology and Skill Training in the Informal Sector in the North West Frontier Province of Pakistan
December 1988

Tunsiri, Vichai
The Thai Indigenous Learning System, and its Significance in the Educational Process for Change and Development
December 1988

Unesco Institute for Education (UIE) Hamburg, 6-7 May 1988
Information Document*

Verghese, Shobhana
The Educationalisation of Vocation
October 1988

Visser, Jan and Luis F. Pereira
The Role of Education in the Process of Cultural and Socio-Economical Reintegration of Children and Teachers in the War Zones of Mozambique
December 1988

Wolfgang, M.
Structures and Organisation of National Research Institutions : A Synthesis of eleven base Studies
May 1987*

* Paper distributed during the Symposium

Annex 3

Abstracts of the papers prepared

Aklilu Habte
Educational Development: the Challenge of Bridging the Gap

What is the current state of educational advancement throughout the world? Although over the past 25 years dramatic achievements have been made in enrolment and input increases throughout the developing world, the author draws the attention to a widening knowledge gap between the wealthy and poorest economies. Disparities are increasing with respect to such aspects as enrolment and drop-out rates, per capita expenditure, access to educational technology and student achievement.
The paper calls for actions to close this gap. These actions include increased and better managed financial support for education, a strengthening of the management of the educational enterprise, and more emphasis on research and research capacity building.

Eileen Kane
Education, Culture and Productive Life: Taking a Problem Orientation

Some concepts from the anthropological literature are examined for their applicability to a better understanding of education and productive life. The concept of cultural premises as a motivating force in people's decision making, and the dangers of taking a problem versus programme approach to development are explored, with examples from two case studies in Zambia and Ghana.

Cheng Kai Ming
From Education to Work: the cultural dimension

The paper attempts to identify the cultural characteristics of East Asian nations by way of their practices in education at all levels and in all sectors. The paper then describes an on-going research effort to look into the career counselling practices in Hong Kong, and try to explain the effect of such cultural characteristics on economic lives, with special reference to work ethics and employment.
The research seems to suggest that there is an Eastern Asian culture, where individuals are expected to adapt themselves to the community, vis-a-vis the Western European culture, where the community is expected to adapt itself to individual needs. The cultural characteristics may explain the competitiveness of the East Asian nations, as well as the high

pressure in their social life. This difference in culture may also extend to concepts such as self, equality or democracy.

Jose B. Socrates
Improving the Quality of Life: the DELSILIFE way

Can the rural poor decide for themselves what they need to learn in order to improve their social and economic conditions? Is there an appropriate method to stimulate independent identification of learning needs? Which types of learning are the most appropriate to the physical, social and economic conditions of the rural population?
The DELSILIFE educational intervention system tries to give adequate answers to these questions in the South East Asian region. Basic to DELSILIFE is the belief that true development starts with and focuses on people development, and that education is an effective instrument of social change. Education that will convince the people of the reversibility of their destiny, that will make them find solutions to their problems, and will equip them with skills to identify and effectively use available resources, inside and outside the community.
This paper explains the philosophy of the system, its implementation process and management structure.

Leo F.B. Dubbeldam
Culture and Education: Education as the Agent of Transfer or Change

This paper explores the interrelatedness of education and culture inspired by the notion that people have to learn throughout their lives to become a total person ("Learning to be"). Culture is transferred from generation to generation through education, but not in a statical way due to acculturation and creativity. The paper discusses concepts of culture, the interrelatedness of cultural elements, cultural identity as well as change. Education is more than what is offered at "school" and one cannot study school education without taking the other forms of education into account.
There are discrepancies in the objectives and expectations of authorities, educationists and learners as to the appropriateness of the curriculum content. Questions are raised about who decides on the content, its relevance, and what values to be conveyed? How to reach specific groups with suitable programmes? These and other questions are being addressed to in this paper. It concludes with some topics for research and touches upon problems in research.

Adri Kater
The Application of Research into Indigenous Knowledge and Learning: Some Problems

The author presents his reflections on the relevance and usefulness of social research for intervention agencies, in particular with regard to indigenous knowledge and learning systems. A clarification in terminology of scientific and indigenous knowledge is presented, followed by a distinction of different types of situations in which research results may be applied in action programmes. Finally the paper discusses the specificity of indigenous knowledge and learning and the implication this has on its application by intervention agencies.

Eligio B. Barsaga
Case Studies of Indigenous Learning Systems (ILS): Implications to Formal and Non-formal Education

As part of an INNOTECH Research and Development project 4 case studies were conducted to describe and analyse systems of indigenous learning of communities in the Philippines, Indonesia and Thailand. This paper gives a summary of the research findings, discussing for each case the goals and objectives, the methods and techniques of learning, the transmitters and receivers of knowledge, skills and values, and the content and context of learning. In a later paragraph the results are being synthesized into general characteristics of the ILS. On comparing these with the characteristics of the formal education system, the author advocates a mutually reinforcing integration of the native and new learning systems which might lead to more acceptable and better quality of rural education.

Vichai Tunsiri
The Thai Indigenous Learning System, and its Significance in the Educational Process for Change and Development

Education, to be effective, should be embedded in the cultural context of the society. The indigenous learning system is part and parcel of the culture, and hence it should be incorporated, where possible, in the educational system of the society.
But what is meant by indigenous learning in the Thai context? Is there a difference between the traditional indigenous learning systems and the present-day indigenous systems? What elements of the indigenous learning systems can be applied in the process of human resource development in the present day? What are the limitations? These are some of the questions being explored in the paper.

Soehirman Patmo
Traditional Learning: the Training of Dalangs

A description is given of the traditional training of dalangs (puppeteers) in Indonesia. In a situation where educational institutions are not available, traditional learning methods prove to be useful in the transfer of knowledge, skills and values.
The author argues that traditional learning methods are particularly effective as a means to transfer cultural values from one generation to the next, and pleads for further research to find out whether traditional learning methods are also relevant and applicable to modern, technical and western learning contents.

Joannes Riberu
A National Cultural Identity in Process: Indonesian Experiment

After independence the government of Indonesia faced the enormous task to mould the archipelago, divers in religion, ethnical lineage, geographical environment and level of development, into one united nation. A common national base was developed by making a main trait of the cultural heritage of all ethnic groups in Indonesia the guiding principles for all policical, economical and socio-cultural activities. The paper discusses these principles, the so-called Pancasila, and the role education has played in the building of this national cultural identity.

Ramesh Chandra Devkota
Non-formal Education and Rural Development in Nepal

This paper explains the role of the Seti Project in the Far Eastern Region of Nepal. As an experimental and innovative project it has developed a series of non-formal educational programmes in the rural areas. The focus of this paper is on the Cheli Beti Programme, a special non-formal education programme for young girls, a group that sofar was neglected socially as well as educationally. The success of the programme has influenced the development planners and educationalists, showing them the relevance of the replication of this programme to similar problematic areas.

Anke van Dam and Gerhard Peter
Recent Discussions on Popular Education in Latin America

Popular education programmes take as a starting point the knowledge and experience of the participants in the groups. The methodology of popular education focuses on collective participation. The relation between educator and particpants in the education process is characterized by

equality, in contrast to the formal hierarchical educational systems. In this paper the authors take stock of the results obtained with popular education approaches over the last few decades in Latin America. They point at a number of critical issues at theoretical as well as practical level that seem to hamper the effectiveness of some of the programmes, and make suggestions for research issues that may help to overcome the identified bottlenecks.

Jan L.P. Ooijens
Education and Cultural Identity in Colombian Amazonia

Education in the National Territories of Colombia has been neglected. This is due to the long distances and the deficient modes of communication added to other factors such as the scant interest shown by the central authorities, the lack of initiative and the poor local human resources. In 1978, the Colombian and the Dutch Government together designed a bilateral project with the objective of developing an educational model for these Territories. This paper provides some background information on the project, referring to the applied educational model and dealing with the factors which have influenced the development of the educational process.

Eberhard Chambulikazi
Theatre as a Communication Medium in Community Development

The paper argues that popular theatre is communication in a confined sense. It has particular features which are woven around the human factor, and often lack in other media. The basic elements of this communication and development are aesthetics, conscientization, dialogue and participation. The whole process of performance reveals these essential features. Popular theatre creates a horizontal type of communication which opposes the classical top-down channel.
The paper discusses these special features of popular theatre in the light of the concept of development theories/practices that have been experimented so far in the third world. Tanzania is the case study.

Luis F. Pereira and Jan Visser
The Role of Education in the Process of Cultural and Socio-economical Reintegration of Children and Teachers in the War Zones of Mozambique

The paper analyzes the development of education in Mozambique from the pre- independence era till now in relation to the changing historical context and against the background of different available models. The National Educational System which resulted from this process is felt to be less than adequate respons to the present needs of the Mozambican

society, which has been profoundly affected by the advent of undeclared war. The consequences of this new situation are analyzed. The strategy currently adopted to accomodate the special needs of large numbers of children and teachers affected by the war is discussed.

Antonio Cabral de Andrade
Education and Production: the Experience of Latin America and the Caribbean

After making a distinction between Education for Production and Education-cum- Production the paper reports on the findings and results obtained with programmes and projects aimed at Education-cum-Production in Latin America, the Caribbean and some African countries. Differences are observed between socialist and market economy countries with respect to the objectives, functionality and successes of these programmes. Controversial questions are being tackled, such as the scope of the concept "productive activity" and the link between productive activities on the one hand, and education and training on the other. Problems with regard to the introduction and implementation of Education-cum-Production projects are discussed related to different political environments, and a number of innovative experiments are being presented, both from the formal as well as from the non-formal education sector.

Emiel Droogleever Fortuijn
Methodological Reflections on the Evaluation of Work-related Educational Programmes: the Evaluation of Evaluation Research Practices

The author reviews some evaluation practices in the field of work-related educational programmes, in order to spot common deficiencies and particular strong points. After an exploration of the various opinions on the purposes and types of evaluation, the practice of evaluation research is being examined on its theoretical approaches, the questions being asked, and aspects being selected for evaluation. The paper deals then with the question on how educational programmes directed at the school-work transition can be supported by improving evaluation research practices. The author warns against too much optimism about the effects of evaluation research, mainly because the evaluator cannot escape from playing a part, whether he or she likes it or not, in a political arena.

Jose C. Gatchalian and Miraflora M. Gatchalian
Coping for Survival: Focus on the Participants in the Underground Economy of Manila

"Underground" employment in a country suffering from grave unemployment problems, appears to be the only means for coping with a deepening economic crisis. The informal sector offers the poor and unemployed a real opportunity to provide their families with the minimal living requirements. The paper presents the findings of a survey conducted among 1000 "underground" entrepeneurs in Metro Manila in 1986. It describes the types of "business" they are involved in, the work environments, their socio-economic characteristics, problems and expectations. The authors further discuss positive and negative aspects and implications of the underground economy.

Shobhana Verghese
The Educationalisation of Vocation

The author offers an educational alternative for the non-productive and alien scheme of education existing in India today. She comes to the formulation of this alternative scheme, with its focus on the preparation for productive life and oriented towards Indian culture, after comparing the indigenous Vedic system of education with the imported British educational system, and an analysis of a survey conducted over two generations of women from two different communities.

Leon Tomesen
Transfer of Technology and Skill Training in the Informal Sector in the North West Frontier Province of Pakistan

The paper presents a case study of a project aimed at upgrading the small scale industry of Pakistan's North West Frontier Province. Three categories of enterprises formed the target group: automotive workshops, welding and sheet in metal workshops and light engineering workshops. The transfer of technical skills took place by mobile training workshops travelling all over the province. The technical skills were complemented with training in other non- productive skills, such as administration and management. The paper presents the policies and strategies of the project as well as the achievements to date. More research is needed to derive measures of efficiency and to highlight factors influencing effectiveness of skill and technology transfer.

Kan Feng Min
Girls' Participation in Technical and Vocational Training

China's drive towards economic reform and modernization requires more people with adequate technical and vocational knowledge. However, the educational quality of the labour force is generally very low, especially that of women. Of the 43 million working women, 90% are farmers and workers, mainly engaged in physical labour. If women are to play their part in facing the challenge put forward by modern production methods, they need to have access to technical and vocational training opportunities as well as equal and unrestricted access to the labour market. Although progress has been made in the recent past, girls' opportunities for training and employment remain very much determined by traditional values regarding the role of women in the family and society.

Vichai Tunsiri and Kla Somtrakool
Education for Productive Life

In 1982 the Thai Supreme Command Quarters in cooperation with the Non-Formal Education Department started a vocational training and development project near the troubled Thai-Kampuchean border with the aim to promote people's income, secure occupation, uplift their morale and by doing so, keep the people from migrating. In the first year of its operation the project concentrated on the transfer of a number of technical skills via courses organized at the training centre. Evaluation results showed that many participants made use of the acquired skills but most of them lacked the necessary basic life skills to turn the skills into a profitable business. Also became apparent that especially the young participants after completing a course went to urban centres in the hope to find a job. These findings led to a modification of the project approach and restructuring of its activities. Technical courses were to include non-technical subjects such as management, marketing and planning for self-employment, and courses were organized with and for the communities in their villages.

George A. Malekela
Educating for Self-Employment at the Primary School Level: Tanzanian Experience 1967-1987

This paper attempts to show in a historical perspective how education from the pre-colonial through the post-Arusha period has been linked to productive life. Greater attention and length are given to the post-Arusha period (1967 to date) due to Education for Self-Reliance (ESR) policy that emphasizes the need to integrate mental and productive work. Achievements and weaknesses of the policy implementation are shown.

Recommendations for future action are made.

Taka P. Mudariki
Culture, Productive Life and Adult Education - The Case for Zimbabwe

In pre-colonial Zimbabwe no division existed between culture, productive life and education. This was drastically changed with the advent of colonial capitalism with its rigid work schedules and strict division of labour. The paper seeks to explore possible strategies for reintegrating culture, production and adult education at the work place for both workers and peasants. The role of the government, the private sector, the trade unions, cooperatives and the farmers associations and unions are analysed and ways of their involvement suggested. The aim is to integrate the three elements in order to produce totally developed workers or peasants - who are often excluded from cultural activities, except traditional dancing which is often performed for the consumption of the elite.

Daniel N. Sifuna
Self-Help Technical Training Institutions and Education with Production in Kenya: the Case of Youth Polytechnics and Harambee Institutions of Technology

Although education with production have not been officially embodied in the mainstream of the education system in Kenya, it is widely practised by self- help training institutions especially in the Youth Polytechnics and Harambee Institutes of Technology. This has been prompted by the fact that it has become increasingly expensive to finance these institutions on self-help basis. Although these institutions receive financial assistance from the community, local and international organisations as well as government support in the form of instructors salaries, they have switched to production to subsidize these sources to meet capital and recurrent expenditures. Production has also been adopted as a way of socialising the youth more effectively into the technical and social requirements of the work environment.

Bernahu Dibaba, Denke Mekuria and Kahsaye Mellese
A summary of the findings of the survey on "The State of Education for Production in Ethiopia"

In Ethiopia several educational reforms have been undertaken to combine theoretical class room instruction with production. At present there are two types of curricular materials that are known as the transitional and experimental curriculum being implemented in formal schools. The latter is a trial programme running in 70 schools spreaded all over the country.

Despite the attention given to education with production programmes in Ethiopia, so far little empirical research has been carried out in the transitional formal and non-formal education or training centres an at place of work after schooling or training. This paper gives a summary of the findings of a preliminary survey of the state of education for production in Ethiopia.

Kenneth King
Aid and Educational Research in Developing Countries: Dutch Perspectives

"Briefly, the Netherlands government does not have a comprehensive policy concerning aid to education. However, this does not mean it does not have any policy at all. On the contrary, there are a number of policies, mainly organised on the basis of a particular relationship between the Netherlands and a developing country or a group of countries". The author feels that this comment, prepared for a meeting on educational aid in 1986, could be extended to the role of Dutch research and evaluation in the fields of education and training in developing countries.
In this paper the author makes an attempt to clarify some of these policies by looking at a number of Dutch institutions which have had longterm relationships with overseas countries in the field of education. The author looks at their institutional traditions and illustrates their stand through some of their research and evaluation activities. Presented are NUFFIC, CESO and the Bernard van Leer Foundation, and touched upon is the role of the research advisory process (RAWOO), and the role of those in the Dutch research community concerned with research on education in developing countries (WGOO).

Wim E. Biervliet
The Design of a Programme for North-South Collaborative Educational Research: Balancing between Bondage and Razors Edge

The paper outlines Dutch development assistance especially in fields related to education, training and research. Policy research on education for development executed by the World Bank in support of its lending programme is sketched as an important factor in shaping the educational research agenda in developing countries. Approaches of other donors in those fields are highlighted especially focusing on the approaches opted for by IDRC and SAREC. Types of collaborative educational research for development and constraints in arriving at joint North-South research in equal partnership are described and efforts by CESO and researchers from Dutch universities to arrive at such research are outlined and assessed.

The main components of a research proposal to design a comprehensive programme of research related to the themes 'education,

labour market and employment' and 'education and culture' are described. Some initial comments are made on the interactive methodology and on procedures to arrive at a proper involvement of research environments in developing countries in the design of the collaborative research programme.

Wim H.M.L. Hoppers
Education and Production in Theory and Action (EPTA): Learning from Networking in East and Southern Africa

The paper gives an overview of the origine and development of the EPTA network and its programme activities, and attempts to analyse the experiences of such a network as a mechanism for initiating and developing research in education and insuring greater interaction between policy makers, researchers and practitioners.
The overview is limited to the developments and experiences of EPTA in East and Southern Africa. For this region pointers are made about possibilities for future developments in this network.

Zainal D. Ghani
SEARRAG - Creating Support and Linkages for Educational Research in South East Asia

A brief description is given of the establishment of the Southeast Asian Research Review and Advisory Group (SEARRAG) and its activities to date. The development of SEARRAG is traced as a regional organization highlighting the critical points of its evolution or development such as, the rationale for its establishment, its membership, organizational structure and activitie Some of the salient points are reported regarding educational research in the SEARRAG region arising from the different activities that it has organized.

Zellyne D. Jennings
Facilitating the Transition from School to Work: a Study of the Effectiveness of Work Experience Programmes in Secondary Schools in the Commonwealth

This paper examines the extent to which different types of work experience programmes (WEP) in Commonwealth secondary schools have succeeded in achieving the objective of preparing more young people for the working world. Despite problems, including a lack of material and human resources and negative attitudes towards agricultural work especially, many positive features of WEP emerge in the paper. Benefits to both schools and pupils are discussed.
Providing incentives to employers to make more work opportunities

available to school leavers, and the centralisation of the organisation of WEP, particularly in the developing countries, are underscored as some of the ways of improving the effectiveness of work experience programmes.

Annex 4

Biodata of the participants

Karamat Ali (Pakistan)
Is co-ordinator of a national survey on Female Industrial Labour Force in Pakistan, and co-ordinator of the Trade Union Leadership Development Programme. Is secretary of the Pakistan Institute of Labour Education and Research, and of Research Education and Culture, Muttahida Labour Federation Pakistan. Has been involved in various capacities in Trade Union activities since 1972, and has written on labour relations and collective bargaining processes.

Eligio B. Barsaga (Philippines)
Senior Specialist (Research and Evaluation) at INNOTECH, the Philippines, with major expertise in educational management, educational research and development, mathematics education and computer-based education. Prior to his present position, held numerous positions as teacher, instructor, lecturer and assistant professor at universities and colleges in the Philippines. Has been involved in numerous educational research projects, in many instances as project director. Has published on a number of educational topics such as school performance, educational opportunities, academic achievements, indigenous learning, non-formal education and material development.

Anbesu Biazen (Ethiopia)
Taught physics and mathematics at secondary schools from 1973 till 1981 and was science department head during the last of those two years. Became curriculum evaluation and research expert of the Curriculum Department in 1982, and was appointed Head of the Curriculum Evaluation and Research Panel in 1987. Contributed to evaluations of various aspects of the Ethiopian school system and wrote on curriculum evaluation and long term strategies for curriculum development.

Wim E. Biervliet (Surinam)
Did migration research 1973-76 for ZWO, and training course evaluations for ITC in the Netherlands 1976-78. Joined the ILO in 1979 and was involved in non-formal education projects in South-East Asia, curriculum development and evaluation. Worked from 1982 to 1986 for the EEC, Brussels, on youth programmes and the transition from school to work, and information networks on inter-university co-operation. He joined CESO as a research fellow in 1986.

Ad J.J.M. Boeren (the Netherlands)
Worked from 1979-1983 and 1985-86 for the FAO in East Africa, developing educational materials for extension services and training extension officers in materials development, the effective use of audio-visual aids and effective communication. Lecturer in Visual Communication at the Leiden State University, Anthropology Department, from 1983-85. Joined CESO as a research fellow in 1986. He has written on visual perception, visual communication and media.

Antonio Cabral de Andrade (Brazil)
Worked in Education and Human Resource Development Planning in Brazil and Urugay as from 1962. Joined the ILO in 1970 as Chief Technical Adviser of an ILO Employment Planning Project in Peru, and became in 1973 Regional Adviser. Returned to Brazil in 1975 to hold high level positions in the Ministries of Education and Planning. Joined the ILO again in 1984 and is since 1986 Senior Official of the ILO Training Policy Branch, stationed in Geneva. Was consultant to UNESCO, Organization of American States, and the World Bank. Has written articles on education with production, social policies, manpower planning and educational planning.

Eberhard Chambulikazi (Tanzania)
Graduated in 1977, major in Theatre and minor in Education. Has since acted frequently as a resource person for workshops on Theatre for Rural Development in Zambia and Tanzania. As a member of the Department of Art, Music and Theatre, he participated in a three-year project in Tanzania called Theatre for Social Development. Published on popular theatre and social change, and was from 1983-86 editor of the Union of African Performing Artists for Eastern Africa.

Cheng Kai Ming (Hong Kong)
Was trained as a mathematician and worked as a school teacher and school principal for fifteen years. Obtained a PhD in educational planning and policy analysis at the University of London. Was the founding chairman of the Hong Kong Council for Educational Administration, and now works as a senior lecturer in the department of education, university of Hong Kong. Has been involved in consultancy work for Unicef, IIEP and the World Bank. Is currently involved in research on rural basic education,vocational secondary education and higher education in China, specializing in finance, planning and management of the education system.

Oscar E. Corvalan-Vasquez (Chili)
Trained as a sociologist, obtained a PhD in educational economics at the University of Toronto in 1978. Worked for CINTERFOR-ILO, Urugay

from 1979 to 1981 as co-ordinator of a Latin American study on vocational apprenticeship. Joined the ILO from 1982 to 1984 as Youth Training Specialist and CTA responsible for a manpower planning project. Was senior researcher of CIDE, Chili, 1984-88 and is at present invited professor of the Institut Universitaire d'Etudes du Dveloppement in Geneva.

Anke van Dam (the Netherlands)
Studied general and comparative education in Amsterdam. Acted as adviser and participant in an education project in Columbia. Joined CESO in 1987 to compile and write reports on the education situation in the ten programme countries of the Dutch governmental development co-operation. Has written on education for women and educational alternatives.

R.C. Devkota (Nepal)
Worked since 1971 as a school teacher, headmaster and literacy worker in Nepal. He contributed to various non-formal education projects, and founded the Non-formal Education Centre, aimed at the development of various non-formal education programmes, in 1984. He has developed various training and learning materials, and has written articles on education for development.

Emiel Droogleever Fortuijn (the Netherlands)
Staff member Department of Sociology, University of Amsterdam (UvA), 1967-1989. Field research on local power structures (Greece), on social development strategies (Surinam) and on educational development and evaluation (Venezuela). Research in the Netherlands has been concentrated on three themes: transition of secondary to higher education, student counseling on secondary schools and the relation between education and labour market. President of the Dutch Association of Researchers on Education in Developing Countries (WGOO).

Leo F.B. Dubbeldam (the Netherlands)
Director of CESO and professor of Education in Developing Countries at the Utrecht State University. Worked four years in the Civil Service in Netherlands New Guinea, before joining CESO in 1963. Conducted many studies on education in East Africa and South-East Asia, affiliated with ICED in 1979-80 and contributed to a study entitled "The World Educational Crisis" led by Dr. Philip Coombs. Member of the National Advisory Board for Development Co-operation (NAR) and the Advisory Council for Scientific Research in Developing Countries (RAWOO). Published various policy papers, concerning university co-operation and international education, as well as about the Netherlands policy or educational co-operation. Wrote a number of papers on current issues in

education, both concerning quantitative developments and cultural aspects.

Kees P. Epskamp (the Netherlands)
Joined CESO immediately after obtaining his Masters in Social Anthropology in 1977. Is in charge of documentation and editor of publications. Conducted evaluation studies of media supported educational projects in South America and Africa. Did extensive literature research on the use of media for development, especially small media and theatre. Co-ordinator of the CESO inter-university course on Education in Developing Countries, and for several years guest lecturer at the Department of Theatre Studies of the University of Amsterdam. Has written many articles on development support communication, in particular on popular theatre.

Jose C. Gatchalian (Philippines)
Is a full professor and former Dean of the School of Labor and Industrial Relations, University of the Philippines. In the field of industrial relations and workers' education he pioneered in the promotion of workers participation and labour-management co-operation in the Philippines. His recent researches include studies on culture and industrial relations, child labour, underground economy in Metro Manila and a survey of labour-management consultation mechanisms.

Zainal D. Ghani (Malaysia)
Since 1972 lecturer in Science Education and Curriculum Studies. Presently associate professor in Curriculum Studies. Before that from 1967 to 1972 Education Officer in Brunei. Is director of project InSPIRE, Universiti Sains Malaysia. InSPIRE is a generic name for a series of projects focused at raising the achievement levels of primary school children in the rural environment in Malaysia. Also co-ordinator (in charge of information services and publications) of the South-East Asian Research Review and Advisory Group (SEARRAG).

Monica Granados (Costa Rica)
Graduated from the National Autonomous University of Mexico (UNAM). In 1984 she was director of the Project of Social Promotion in Urban Marginalized Zones in Mexico. From 1985-1986 she became advisor of the Organization of Community Therapy Groups in areas that were struck by national disasters. In 1988 she took up the directorship of the Research Project on the History of the Social Centre for Childhood in Costa Rica.

Aklilu Habte (Ethiopia)
Joined the World Bank in August 1977 as Director of the Education Department. In July 1987 he became Special Adviser in Human Resources Development in the African Region. From 1958 he was with Haile Selassie I University, Addis Abeba, successively as Lecturer in Education, Head of the Department of Education, Dean of the Faculty of Arts, Associate Academic Vice President and, lastly, as President of the University (1969-1974). From 1974 to 1977 he served as Minister of Culture, Sports and Youth Affairs in the Government of Ethiopia.
He obtained a Master of Education and Doctorate from Ohio State University (1956 and 1958), and Hon. D.H.L. from Ohio State University (1972).
Habte has served on numerous boards, including the Executive Board of UNESCO, the Association of African Universities, the United Nations University Council, the International Council for Educational Development, and is a Distinguished Fellow of the Academy for Educational Development.

Wim H.M.L. Hoppers (the Netherlands)
Taught History and Social Science at secondary school level in Zambia from 1972-74. Was lecturer in Education, University of Zambia, from 1974-79, and Research Fellow with WOTRO in the period 1980-82. Conducted studies on in-service training for teachers, school leavers in rural areas and non-formal training and employment for out-of-school youths. Joined CESO in 1982 carrying out evaluation missions and studying training and employment programmes for youth, mainly in Africa. Wrote several books on educational/training issues related to out-of-school youth and school leavers in a wider societal context. Published a variety of articles on issues in work-related education. Is currently working in Zambia, seconded to SIDA, as co-ordinator of the "Self- Help Action Plan for Education" (SHAPE) of the Ministry of Education.

Zellyne D. Jennings (Jamaica)
Lecturer in Educational Foundations at the University of the West Indies since 1976. Presently Senior Lecturer and Head of Educational Studies in the Faculty of Education. She has written several articles on education for productive life and on educational technology.

Eileen Kane (Ireland)
Since 1984 Head of Department of Anthropology, St. Patrick's College, Maynooth, Ireland. Holds a PhD in Cultural Anthropology, University of Pittsburgh, Pennsylvania. Carried out various consultancies since 1970, e.g. for the ILO. Published on kinship, rural poverty, psychology, traditional economies, women and vocational training and other subjects.

Is Irish government appointee to Advisory Council on Development Co-operation (ACDC) and Board member of HEDCO (Higher Education for Development Co-operation) and member of the Irish Board of the International Interdisciplinary Congress on Women.

Adri Kater (the Netherlands)
Worked for the UN in Marocco in 1958-60 (community development), and for two Dutch musea from 1960-65. Joined the Africa Study Centre in Leiden in 1965 and moved to the Netherlands Universities Foundation for International Co-operation (NUFFIC) in 1977. At NUFFIC he initiated and co-ordinated inter-university development co-operations. Since 1977 he has been with CESO carrying out evaluations of educational projects, and doing research in indigenous knowledge and learning systems. He published on rural participation programmes, evaluation methods and indigenous learning.

Kenneth King (United Kingdom)
Is reader in Education and in African Studies in Edinburgh University, where he is currently director of the Centre of African Studies. His research interests include the analysis of the role of the donor agencies in education; technical and vocational education; science and technology education; and the informal and micro-enterprise sectors. He is the joint editor of NORRAG NEWS, and the author of many books and articles. His most recent book, *Aid and Education Research*, will be published by Longman in 1990.

George A. Malekela (Tanzania)
Has been teaching since 1975, first at the Dar-es-Salaam School of Accountancy, later on at the University of Dar-es-Salaam. Since 1986 he has held the rank of Senior Lecturer. He obtained a PhD from the University of Chicago in 1983. Published several papers on primary and secondary education and the impact of selection procedures in Tanzania.

Kan Feng Min (China)
Worked as a laboratory technician before taking up a study in English and American literature in Liaoning University, Shengyang, China. From 1977 to 1986 she worked as an English teacher at the Beijing University of Aeronautics and Astronautics. Obtained a Master's Degree, Women's programme, from the Institute of Social Studies in the Hague in 1988, and is currently conducting research on women's technical and vocational education and training in Beijing.

Taka P. Mudariki (Zimbabwe)
Started as a secondary school teacher in Zimbabwe in 1970 and moved to Botswana in 1973. Was lecturer in the Institute of Adult Education of the

University of Botswana from 1977-80. Returned to Zimbabwe in 1980 to take up various positions in Government and University. Was director of the Zimbabwe Foundation for Education with Production (ZIMFEP) from 1985-88. Became chair person of the Zimbabwe National Council for Adult Education and Non-formal Education in 1984.

Hena Mukherjee (Malaysia)
Associate professor in the Department of Social Foundations, Faculty of Education, University of Malaysia. Currently on a three-year secondment to the Commonwealth Secretariat in London, charged with the development of guidelines for entrepeneurial skills development programmes particularly for technical and vocational institutions. Her specialist areas include comparative education, value education, education and inter-ethnic relations, workplace orientations and behaviour.

Toshio Ohsako (Japan)
Joined the Education Sector of UNESCO in 1979 as specialist responsible for educational research, evaluation and contents of education in the Division of Educational Sciences, Contents and Methods. Received his Ph.D. at Michigan State University in educational psychology (1973). Before joining UNESCO he taught educational psychology, evaluation, research design and statistics and cross-cultural psychology at Sophia University, Tokyo (1973-79). He was awarded a Visiting Research Fellowship to the Culture Learning Institute, East-West Center, Hawaii in 1975. Is the co-editor of Programmed Introductory Psychology (1976) and has published numerous articles on various aspects of applied cross-cultural research, educational research and international education.

Jan L.P. Ooijens (the Netherlands)
Joined CREFAL (1969-1973), Patzcuaro, Mexico, a regional centre for adult education in the rural areas of Latin America. Since 1974, he is working at the section of Cultural Anthropology of the State University of Utrecht. During the past twenty years, repeatedly he has been involved in projects for adult education and rural development in Latin America, especially Mexico.

Soehirman Patmo (Surinam)
Lectured at the Social Academy in The Hague from 1978-81. Joined the ILO in 1981 and worked in Thailand and Indonesia for the regional project "Labour and Population" and for the National Training Centre for Co-operative Development in Indonesia. Specialized in methods and techniques of adult education and the production of A-V aids. Planned co-operative training programmes and contributed to the design of training management systems. He started working for CESO in 1987.

Louis F.F. Andrade da Conceicao Pereira (Mozambique)
Taught history and philosophy at secondary schools between 1965 and 1975. Became director of the Primary School Teacher Training College in 1974 and director of Radio Mozambique in 1975. In 1978-79 he was Deputy National Director of Education. Concurrently he was assistant lecturer at the Mondlane University in the priod 1975-80. From 1980-87 he was director of the National Institute for the Development of Education. Has written on education and development in Africa, with particular emphasis on Mozambique.

Gerhard W. Peter (the Netherlands)
Worked for FAO in South America from 1980-82 on the evaluation of training programmes. Moved in 1982 to the Latin America Division of the IFAD in Rome to co-ordinate the monitoring and evaluation activities of all projects in Latin America. Joined the International Education Programme of the Directorate General International Co-operation (DGIS) in the Netherlands as programme officer in 1985. Started working for CESO in 1987.

Joannes Riberu (Indonesia)
Studied philosophy and theology and obtained a PhD in pedagogy. Since 1966 lecturer at various institutes of higher education, such as the Catholic University Atma Jaya and the Universitas Indonesia. Member of many committees and boards of governmental and non-governmental institutions in the areas of education, religion, national defence and media. Since 1987 member of parliament and member of Committee IX, concerned with education and culture, religious affairs, youth and sports. Has written books on lay clergy, leadership, human relationships and adaptation in family life.

Cynthia A. Ringeling (Surinam)
After completing her Masters in Pedagogy at the University of Amsterdam, she worked for two years as adviser to kindergarten schools in dealing with multi-cultural classes. From 1984-86 she was co-ordinator of a programme aimed at increasing education opportunities for ethnic groups. In 1986 she returned to Surinam and works there as an orthopedagogue for the Ministry of Education.

Daniel N. Sifuna (Kenya)
Became lecturer in the Department of Education of the University of Nairobi in 1975. Obtained a PhD from the same University in 1977, was promoted to associate professor in 1984 and is a full professor since 1988. Since 1984 he also acts as Chairman of the Department. Published books on primary and vocational education in Kenya, and articles on educational policy, industrial education and non-formal training in the

informal sector.

Jose B. Socrates (Philippines)
From 1977-1989 Head, Research Division of INNOTECH (the Regional Center for Educational Innovation and Technology of the South East Asian Ministers of Education Organization - SEAMEO). In this period INNOTECH initiated and conducted various Research and Development Projects for the formal and non-formal education sector in the region, among others project DELSILIFE. Before joining INNOTECH he was Assistant Professor, College of Education, University of the Philippines (1964-72) and Director, Curriculum and Instruction Division, of the Fund for Assistance to Private Education (FAPE), 1972-77.
He obtained a Ph.D. in Education, Curriculum an Instruction at the University of Chicago in 1964.

Kla Somtrakol (Thailand)
Since 1987 Director, Nonformal Education Development Division, Nonformal Education Department, Ministry of Education, Thailand. Obtained a Masters in Adult Education at Morehead State University, Kentucky, USA, and a Doctorate in International Nonformal Education at the University of Massachusetts.
Started his working experience as a teacher in 1956, and taught at primary and vocational schools. Became Head of the Lifelong Education Center Project in 1973, and was Director of the Vocational Training and Development Center in Prachinburi from 1982-87. Is part-time lecturer and research adviser at 4 universities in Thailand and chairman of the Agricultural Youth Training Center under His Majesty the King Project. Published on lifelong education and appropriate technology.

Tarwotjo (Indonesia)
Worked as a teacher from 1954 till 1960. Joined the Ministry of Education in 1960 and held various positions such as Director of Basic Education, Chief of Bureau of Personnel and Head of Innovation of Education and Culture. Senior lecturer and assistant Dean of the Faculty of Social and Political Sciences at Universitas Terbuka. Published on educational anthropology and a practical guide for students and volunteers entering the village.

Leon Thomesen (the Netherlands)
Obtained a Masters in mechanical engineering at the Eindhoven University of Technology in 1972. Was lecturer in the Netherlands from 1972-74, and at the Ibadan Polytechnic, Nigeria, from 1975-78. Developed a qualitative model for analyzing technical education systems in developing countries in 1979, and worked as educational and technical consultant for the Swiss Development Cooperation, attached to the

University of Dar es Salaam, Tanzania from 1980 - 1984. Joined Gemco Industrial Development (G.I.D.) in 1985 as Chief Technical Adviser of 2 projects in Pakistan, and was Regional Director (South-West Asia) for G.I.D. from May-December 1988. Has written extensively on vocational training, small scale industries and appropriate technology.

Vichai Tunsiri (Thailand)
Deputy Director-General of the Department of Non-formal Education, Ministry of Education, since 1987. Before that Deputy Director-General of the Department of Curriculum and Instructional Development (1986-87), and Director of Education Planning (1984-86). Was Deputy Permanent Delegate to UNESCO from 1982-84, and from 1978-82 Director of External Relations, and Deputy Secretary-General for the National Commission for UNESCO. Held the position of Director of Curriculum Development from 1974-76 and that of Director of Education Research from 1976-78.

T.K.N. Unnithan (India)
Professor of Sociology and former Vice-Chancellor of the University of Rajasthan, where he devèloped the Department of Sociology. Organized many academic programmes including an International Conference on Human Ecology, and the All India Vice-Chancellors' Conference on Value-Oriented Education. Directed research projects for UNESCO, UNICEF and the Indian Government. Currently he is directing a project on Value Orientation for the University Grants Commission. Has written many books and articles on Gandhian thought, peace studies, human ecology and rural and urban sociology.

Sobhana Verghese (India)
Has been teaching History and English Language and Literature at various levels of education, and has been for the last four years Head of a large Secondary School (2000 pupils). Has been working in the field of text book enrichment for many years.

Jan Visser (the Netherlands)
Taught physics and mathematics at various educational levels in the Netherlands and Israel between 1963 and 1970. Worked in Botswana for UNESCO from 1971-74 in the field of teacher training. Has been working in Mozambique since 1976 and is Permanent External Adviser to the Distance Education Department, National Institute for the Development of Education, and General Co-ordinator of the Interuniversity Co-operation Netherlands-Mozambique. Was Dean of the Faculty of Education of the Eduardo Mondlane University in the period 1977-79, and now holds there the position of Auxiliary Professor.